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UNDER THE NORTHERN LIGHTS

and Other Stories

JOSEPH RANSOHOFF

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UNDER THE NORTHERN LIGHTS AND OTHER STORIES

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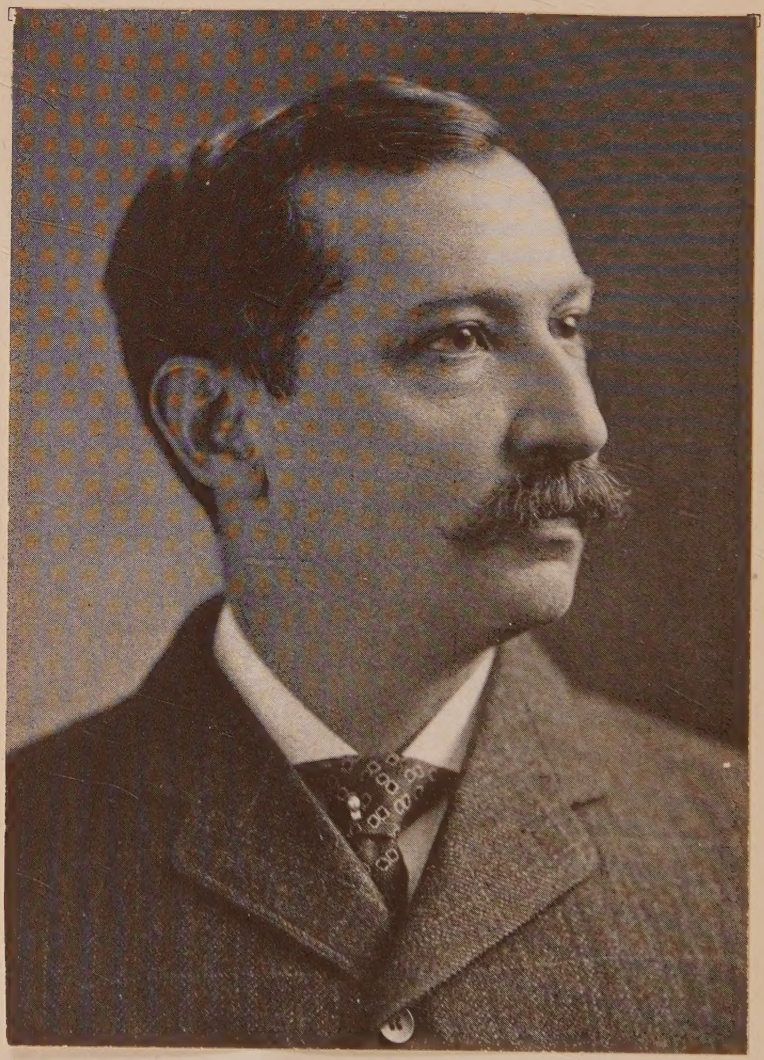

Joseph Renschopp

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EACH year, when his physical and nervous energy was sapped by the unceasing strain of his work, my husband sought rest in the quiet beauty of the woods and the lakes. Here he led the simple life of the woodman, portaging, fishing and cooking over camp fires by day and lulled to sleep at night by the singing of the winds through the northern pines. Here he met and camped with new types of men, half-breeds and magnificent specimens of French Canadians, who were won by the deep humanity of his nature. And because he had learned from life the most beautiful lesson it can teach, the understanding of one's fellow man, they poured out to him tales of struggles and love and faith on far frontiers. Some of these stories he wrote for his own pleasure, and some for the Literary Club of Cincinnati. I have included them in this collection because they signify to me the finest phase of his character, his love for all that was beautiful in nature and in man.

He who brightened the dark hours of so many lives has gone and in his going has left the world a saddened, empty place for those who loved him. In memory of his perfect life I am editing these echoes of his happy days.

MINNIE F. RANSOHOFF

UNDER THE NORTHERN LIGHTS

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WHEN on a summer's day the steamboat clears the lighthouse just out of Point au Baril, standing in the pilot house you can just see the mountains of Killarney rising from the horizon sixty miles to the north and west. The unbroken line of vision forms the cord of an arc. To the left is the wide expanse of the Georgian Bay, to the right its furthermost concave shore studded with thousands of islands, large and small; a veritable inland archipelago.

During the vacation season, tourists in untold numbers cross this reach of water, coming to and going from Killarney, at the eastern end of the north channel that leads to Mackinac. Even in the summer months a high west wind, sweeping across the width of Lake Huron and the Georgian Bay, plays havoc with navigation, and many a time in my cruises among the islands in a little two-mast Collingwood, I would have sold out cheap, but for the keen grey eyes and the steady hand of my bronzed old steersman, George Lemonte, of Byng Inlet.

With the coming in of the first thick ice, the whole region about this neck of earth is almost deserted. The keepers of the lights along the shore desert their charges for more genial parts and other pursuits. Each white lantern-capped tower outlined against the monotone grey of the winter's sky is like a sepulchral shaft to a life that is gone. But at the Point a few fishermen and their families remain the winter through, for the yellow pickerel fetches 20c a pound in New York, and fishing through the ice is fairly profitable.

At Killarney too, a few are anchored the year round. Among them the village priest is easily the first. For at Killarney is the parish church to which, on fine Sundays, worshippers come from many miles in their dog-drawn sledges. To the parish belong some 800 Indians scattered over the big Manitoulin Island. A close second in staying quality is the post doctor. Priest and doctor are as little inclined to follow the sun in his

southern migration, as is the Indian on the aforesaid reservation. The reasons may be material, but that is their affair, not mine. At all events each might have inscribed under the crest, which he did not have, "J'y suis, j'y reste." For years their paths of duty lay parallel and often merged. The long winter evenings they spent in the cozy study of the parish house, where over their pipes and the mildest grog, no subject under heaven, and of course, none above it, escaped discussion. Often it was heated to a temperature in shrieking contrast with the 20 and 30 below zero just outside the door.

Perhaps Muensterberg could name the occult force that on a bitter January night in 1879, arrayed these two on either side of the momentous question on which church and medicine have always stood. "And I tell you again," the doctor shouted, "the church is wrong. Wrong from every viewpoint, from sentiment, from economy. The mother's life comes first; it is the paramount consideration. In the full flush of womanhood, she is a social asset against which the senseless, unborn thing is as nothing. Sacrifice the principal and what chance has the interest. And what of the ties of motherhood, perhaps already formed, and the sacred bonds of wife to man? The time will come, when my art will make the question altogether abstract, but until then I stand aghast when you stay my hand ready to save one life and make me see two go out. It's hell." "Thou shalt not kill," came the calm response of Father Xavier. "The church is *the* great democracy in which the least in life, is as the greatest. The *thing* you call senseless lives from the very beginning, and it is sentient, too. It is innocent. 'Thou shalt not kill' is the commandment, and there is no—." He got no further, for at that moment an unusual thing hurried them to the door. It was the loud baying of hounds on the inlet coming from the direction of Point au Baril. Nearer and nearer they came and finally stopped before the church door. A husky team of deep-chested tawny dogs; quivering in every muscle and painfully panting—with straggly, white beards at their muzzles and eyes all but closed with the frost. To the unbroken harness hung a broken sled. "Sacre Jesu," cried Philip, the fire ranger, attracted by the unwonted noise. "Zey is ze dogs of

Pierre Cailloux, of Point au Baril—it iz a catastroph, and he iz killed." And he patted the tired beasts, broke the ice from their muzzles, rubbed the frost from their eyes and fed them dried fish; as much as they would eat. But the priest and the doctor with a single thought, hurried each to his home for the things needful in his work of salvation. To each it was evident that Pierre had met with an accident on his way to Killarney for help, and it could be for only one kind. And in these northern latitudes help is neither stinted nor long delayed. Within the half hour, as often before, doctor and churchman were huddled close together in a sled as though words had never come between them.

Where the way lay smooth before them, the double span of dogs sped over the ice like a whirlwind. The packed frozen snow gave them a sure footing. Often where the ice was hummocky from pressure breaks, or the snow drifted near some jutting rock, the progress was slow, and priest and doctor on snow shoes helped the panting beasts along. It was near one of these, some seven miles from Killarney, that the dogs suddenly shied, so that they could hardly hold them. On the ice lay a man's rifle and near it was a frozen pool of clotted blood, large as a man's hat. Of Pierre there was no other sign. For one hour they searched separately in every direction, the dogs having been tethered to a spike driven in the ice. They built a fire of driftwood, which would serve as a central point and help bring them together. But it needed not its glare to let them see. The moon was at its full and the great white desolation was lighted up with the radiance of most glorious northern lights. Great streamers of yellow and pink, of green and of steel in quick succession shot far beyond the zenith. The larger stars twinkled through the bright quivering banded rays of colored light, whose serrated edges made of the whole a vast jeweled crown, too large and beautiful for this little world. But the search was fruitless. Pierre was hopelessly lost. As they re-entered the sled, the priest reverently muttered the prayer for the dying, "Benedicat te, in Absentiam," and the windy blasts from the lake moaned a dirge.

II.

Thirty years after the events just chronicled, the economic and business conditions round about Point au Baril were fashioned, though faintly, after those of metropolitan centers, at least during the summer months, and so far as tourists and fishermen were concerned. By way of illustration, there was a boat trust and a guide combine; a monopoly of the fish packing; a combine in tinned provisions, and last, but not least, a bait trust. Worms cost a cent a piece everywhere within a radius of thirty miles to the Point. But truth compels me to say that they were always fat and juicy. They were never torn in two to make them appear more numerous after the practice adopted by some juvenile and irresponsible curb brokers in this perishable article. The master mind of all these combines was Pierre Xavier O'Sullivan Cailloux, as the name appeared on a variegated lot of bill heads. For a captain of industry he was remarkably approachable. "Cailloux," I said to him after paying quite a sum for sundries and lighting the nickle cigar which he had proffered me with the innate liberality of a magnate, "Cailloux," I said,"where in the devil did you get that string of names?" "Well Monsieur," he said, "zit is not my fault. You zee zey gave me the name of everyone who had anyzing to do ven I vaz born. Xavier and O'Sullivan were a priest and a doctor from up Killarney; ze Pierre comes from my father. Pauvre vieux homme; see him walking over there? Walking, always walking?" And after a little, "He never will be alright again." As he said this he pointed to his head in an expressive way, and his eyes were just a little moist, as even magnates' eyes get to be when controlled by emotion. But this sturdy boss of the Point did *not* know how bitter that far away winter morning was, nor had he ever *dreamed* that his mother lay dead a full half hour before he was born. He could not picture to himself the grim reality. How with one careful cut through the inanimate form of his mother the doctor had brought him to life, and how, with his first faint cry was heard in measured cadence, "Ego te baptiso in nomine Patris, Filii et Spiritus Sancti, Amen." He had entered the world after the manner

of Scipio Africanus, of Edward II, and of immortal Shakespeare's Macduff.

There is another figure in the life at the Point, which makes an indelible impression on every one who touches there if only for an hour. It is that of a little man between sixty and seventy, quite well preserved and, considering the still quite primitive environments, very well groomed and cared for. Someone evidently looks after him. He evidently needs attention, for he is the personification of what the Germans call "Geh sucht," or walking mania. During his waking hours he walks, walks, walks—with his eyes in the distance as if in search of something, his body slightly bent forwards, hands locked behind him and dragging the left leg a little, he restlessly paces the pier from end to end, always close to the edge. Every now and then his body sways and it would seem that he must topple into the water. But it never has happened in the many, many years during which the man has followed his irresistible impulse. If you address him in his walk, he answers rationally, but in monosyllables, as if anxious to resume his walk. When a boat makes a landing, he stops long enough to help with the cable, and to carry the mailbag to the office at the end of the pier. Then he resumes his aimless, endless walk from pier-end to pier-end.

Everybody is patient with *Pere* Cailloux as they call him now. His name is Pierre. They *say* that many years ago he met with an accident on the ice and after walking, walking, walking for hours, he was found with a frozen foot at the Bustard Islands, ten miles west of the reach between Killarney and Point au Baril. Sometime, and it must be ere long, he will cease from walking, but the blistering August sun will still illumine the heavens over the Point, and the Aurora shed its brilliant light on wintry nights—and still there will be unsolved the great question on which two good friends were once at variance in a cozy little study in Killarney, while the death of winter reigned without.

AN UNUSUAL METHOD OF REFUNDING A BOND

AN UNUSUAL METHOD OF REFUNDING A BOND

AN EPISODE out of the ordinary may be worth recording, when, after thirty years, its details remain clear-cut and withstand the million and one impressions that have followed and covered it. For verily, the brain cortex of even the greatest is but a little scroll of parchment on which each writing dimmed by time is replaced by another and yet another. A veritable palimpsest is man in his mental makeup, without power to uncover that which is overwrit, will it as he may. Memories rise not on behest, nor can reason bring them forth. Yet a trifle most irrevelevant may spirit them before us and give them life. In the concrete case to be here related, this trifle was not so little at all.

It was the very broad and slatternly back of a housemaid projecting dangerously far from the third story of an old stone front in a part of the city now given over to commerce, office buildings and cheap boarding houses. The sash of the window she was cleaning with uplifted arm, I had raised often in the night. It had been my sleeping room for two years, when I had another for consultation in the first floor front below. Well I remember the cheap bell at the end of its spiral spring, hung high in a corner of the room and set swinging by a pull on the handle by the side of the front door. When polished, which was usually the case, for I had time to do it, this handle was an ornament and attracted the attention of the passerby to the legend inscribed underneath in black, sunken letters, "Dr. Sam'l Morgan. Night Bell."

Now it's out. I'm a doctor. Then I was young, and in that third story front learned to fall into my clothes like the fireman at the tap of the bell. It's like swimming, you can't forget it. My night work is over and done this many a year, but for a consideration I would dress with the youngest, from the stick pin in a correctly tied four-in-hand to the tying of a shoelace warranted not to come undone.

Once I made a record. It was in the middle of the night, when that old bell rang as it never rang before. Its brassy tones voiced the dominant will of a personality far below. It clanged forth a summons that would not be denied. I rushed to the window, raised the sash and poked my uncovered head and shoulders into the midnight cold. As messages cross each other on a single wire, just opposite the second story window my query, "What do you want?" crossed the anguished cry from below, "For God's sake, doctor, hurry. My girl has poisoned herself." "Down in a minute," I cried. It was then that I made my record as a dresser.

The man, apparently not much over twenty, was in a stew. He had evidently come on the run. The sweat rolled from his flushed, almost beardless face. A little birth-mark on the temple seemed ready to burst—it was so red. He was in his shirt sleeves, and that, with the temperature outside near zero. He was frank in every way, even to telling me that I was not his first choice. Dr. M. across the way had referred him to me as a specialist in poison. Poor Dr. M.! I trust the recording angel overlooked that inaccuracy, for the doctor was many years my senior, and pretty well crippled with rheumatism. Soon thereafter he slept with his fathers.

The man's story was quickly told. He was assistant barkeeper at one of the down-town hostelries. Soft drinks were his specialty and occasionally he was entrusted with the mixing of a gin fiz. He dearly loved his Mamie, with whom he had lived for nearly two years in what, by courtesy, is called a "common law marriage." He volunteered that he was insanely jealous. He knew not of whom. An hour before (the midnight closing ordinance was not then on the books), he returned from his work happy in anticipation of the warm embrace awaiting him and the long lingering kiss of welcome. "Ah," he continued, "as I climbed the last step to the landing of my room, I saw the door open and a shadow of a large man skipped out. I am almost sure that I heard him sneak down the back steps and out the alley door." "Why did you not follow him?" I asked as a matter of course. "Oh, gee, Doc, I'm so little and he

looked so big." he answered, That the shadow is always larger than the substance was evidently beyond him in his unreflective mood. It would have been useless to tell him and consume time, which was precious. "Oh, the false cat!" he went on wildly. "When I pushed open the door, she was in bed quietly reading and looked as innocent as you please. She told me that I was dreaming. For answer, I yanked her out of bed by the hair and banged her on the arms, the head and the body. And then I threw her on the floor. There she lay crying with her heart 'fit to break'." He paused for a moment in his narrative as if reflecting on his cruelty or to gain breath to go on with his story. "Most 'fore I knew it," he suddenly went on, "Marie rose from the floor, went to a little closet, where she kept her duds, pulled out a small bottle and with one gulp swallowed every drop. "Doctor," he continued, "if I live a hundred years, I'll never forget how she looked at me. It was like a ghost. And I won't neither forget how sad she said to me 'George, dear, I am so tired of it all. You won't never have such thoughts of me again.' With that she falls like dead in my arms."

Surely there was no time to lose, and my stomach pump was ready for its first service in a poisoning case. But I! Struck suddenly with the little I knew of poisons, I acted on an inspiration. I slipped my visiting list into my pocket. There, year after year, as the little book is reissued, on pages twenty-four to twenty-eight inclusive, I would find all the poisons from acids to zinc and the antidote for each. If need be, I could consult it at the bedside, and that too under one of the subterfuges I had seen my betters use.

As my client and I hurried east on Seventh Street toward Main, he showed me that there was at least one kind of fool which he was not. He had taken precautions to protect himself. He had aroused an old woman living on the floor below, and on his way over he had confided in a policeman.

The house still stands on the east side of Main Street, more rickety than ever. On the third floor rear I found my patient and with her the old woman with frowzy hair and a cheap calico wrapper, and the guardian of the peace. Neither seemed

particularly interested. The room itself was cheerless enough. and cheaply furnished with all that was necessary for housekeeping. In one corner of the room, I found my patient in a poor walnut bed under a tawdry coverlet far from clean. She could not have been over twenty and did not look the part she had acted in her short life. Her face, somewhat flushed, and her clear eyes seemed to give the lie to what I had been told. But, of course, things are not what they seem. In a professional way I looked for evidences of poisoning. I felt the pulse, examined the pupils, looked about for the yield of a revolting stomach. All in vain! On the deal table near the bed I espied a two-ounce bottle and put it to my nose. I knew at once the aroma which still clings to the mummies of ancient Egypt—myrrh, which for ages has been the sweet to go with the bitter.

With the dignity peculiar to a young doctor, I asked to be left along for a moment with my patient. When the onlookers had filed out, I saw a twinkle in the young girl's eye as if in anticipation of what I might have to say. I came quickly to the point. "My young girl," I said, "you can fool the rest, but you can't fool me. What did you take," I asked "and why?" She giggled a bit in a way that seemed innocent enough. "Doc," she said, "that was aloes and myrrh in the bottle. I take a little every morning for my stomach. I feared George was getting tired of me and only pretended to be jealous, and I wanted to scare him." "Did you succeed?" I asked, although I knew what the answer would be. "My God, doctor, he was up in the air, for fair." "Shall I tell him the truth?" I ventured. "Heavens, no," she cried, "I want George, I can't live without him. If you give me away, horses can't hold him." Surely for a young doctor I was in a tight place with only one exit. "In that case, my dear," I said, you must take the antidote." She was nothing loath; indeed, jumped at the chance. As for myself, I was anxious to see the outcome of this little adventure in the submerged half. The experience I might get out of it was in lieu of my fee for services rendered.

Ipecac is such a harmless looking, brownish powder. Dusted on the face it makes one look like a Malay. But ten little grains swallowed with a little water cause an eruption. Poor

little Mamie! Her case developed into one of violent seasickness on terra firma. She bore her brief suffering without complaint. While it was at its height, I could see the look of gratitude in her gentle eyes.

The old woman and the policeman had long since been sent away with the assurance that all danger was over. I too, left after a little while. My last peep into the room assured me that a new bond was in the making.

As I walked home through the biting cold of the night, the icy walk beneath, the glittering belt and scabbard of Orion above, and brilliant Sirius looming over the corner housetop, I could not help but think of the aphorism, which I am told on dubious authority is found in the papyrus Ebers, discovered over 7,000 years ago, between the thighs of a mummy. "The stomach," it says, "makes the blood, and the blood the life, and the life is the soul." "Perhaps," I mused, "my ipecac contained some grains of salvation."

As I turned the key of my door, the policeman strolled by: "That's a tough crowd, Doc," he said, and "Good-night to you."

Ten years later I had a puncture on that beautiful road that runs through Venice to Hamilton. Just where it was I am not going to tell. While my chauffeur was busy repairing it, my little daughter and I sought refuge from the torrid heat in a little candy and fruit shop at a crossroads. A large signboard over the door bore the inscription "soft drinks." Three little children at play unmindful of the glare ran in and out through the open door. To attract the attention of the proprietor I rapped on the glass-covered case containing candies, chewing gum and a box of tooth picks. I must have rapped rather hard, for my summons brought a man and woman from an inner room. The woman entered first. She was neatly dressed, of matronly figure and happy enough from outward appearances. There was something familiar in the face, but I could not place it, until I looked at the man. I could not be mistaken in him, for on the right temple just back of the eye was a birth-mark, large as a finger-nail, but less lurid than when I had seen it once

before. As I sipped a seltzer lemonade, I felt sure that we three recognized each other and that it was best to be mum about it. I felt equally sure that somewhere in the court archives of Hamilton County could be found the records of a combine with power to issue bonds—and to refund them. I know that three coupons were redeemed. I also know that the writer of the Papyrus Ebers knew what he was writing about.

A CASE REPORT

A CASE REPORT

THE lineage of Sholem Barnett certainly reaches way back to the time of Ezra and perhaps further. He is probably unconscious of it, and the Heraldry office in Queen's Square would, I believe, have some difficulty in thus tracing it without a break. At any rate, his forebears were commanded to turn their faces to God three times each year; twice they were thus enjoined in Exodus and once in Deuteronomy.

Therefore, to this day every orthodox Jew finds his way to worship so often at least, and by statute on the Passover, the day of the New Year, and the Day of Atonement. And that is how I happened to meet Uncle Sholem. No, not in the humble side-street synagogue, nor in the stately pillared temple, but in the den of one of our suburban homes, where in a "sleepy-hollow" and the solace of a Cabagne Perfecto, I sought relaxation from the strains of a rather difficult emergency operation just completed in one of the upper rooms. I had heard of Mr. Barnett before. There was nothing orthodox about him; indeed, quite the reverse. When a lad of fourteen he turned his back on the fatherland never again to face it. By the same token the phylacteries, which he had bound upon his arm and placed between his eyes, were lost as in a shuffle in the rush of his new life. And it is so hard to be mindful of the dietary injunctions about "kosher" and "traefe" and the stewing of the kid in its mothers' milk in a country where corn bread and pork in its various manifestations and anaemic pies baked with lard are the staple articles of diet. For, through the help of a relative in the city Sholem Barnett had become an itinerant merchant in a small way; first with a pack on his back and later with a horse and wagon. As he put it to me later, "he was then a Marshall Field on wheels." But such a little one!

Just before the war, as such things will happen, the wheels got stuck; stuck in the ruts of the beautiful little town of Richland, nestling between its low wide, green, rolling hills, and not to be

outdone Sholem, himself, got stuck on one of its girls and began nestling on his own account. He has nestled there a whole lot since. At least I infer that he did, if six children and I know not how many grandchildren are any evidence of nestling. And these have all gone into the great melting pot, where I verily believe they raised the carat value of the composite mixture within and of which it is said ultimate society is in the forming. From all of which you may rightly infer that uncle Barnett's co-nestler was not of his faith. All of which goes to show what I said in the beginning, that there was nothing orthodox about the subject of this sketch.

What his blood craved in the way of worship he took in tabloid form. He concentrated it all in a perennial visit of ten days in the city, where he stopped with the son of his first benefactor. For thirty-five successive years he arrived on the day before the New Year with the regularity of the lunar calendar and departed for home ten days later on the night of the Long Fast Day, which by the way, he rigorously observed. And, as the years rolled on, his hosts looked forward to these visits with ever increasing interest. Uncle Barnett was made much of. He was ever kept in a happy frame of mind by tickling his palate with the sturdy German dishes he loved in the days of his youth. In all of Nicholas County he could not get either lentel soup, soused salmon, Ganse klein or kartoffel kloese such as his mother used to make in his native village of Bavaria. For this hearty old German of over eighty typified the one redeeming physical quality of advancing years, the progressive education of the palate. Hearing goes, sight goes, touch becomes obtunded; alone the sentinel of good digestion, the sense of taste, grows ever more alert. When it goes, ring down the final curtain.

The formal introduction over, I recognized from his remark the genial South German in Mr. Barnett. He had a delicious way of failing to differentiate in conventional form the B and the P, the D and the T. The Th, the special consonant of English, his tongue had never mastered.

"Docder," said Uncle Barnett, 'id don'd dake you long now adays to git to verk und to git trough wid id." As a compliment to the guild, I could not honestly let this go unchallenged.

"You are wrong," I therefore said. "Why the old surgeons could have left us moderns at the post, when it came to dexterity and speed. During the war, Uncle Barnett, they many a time took off a leg at the hip in twenty seconds or less. No surgeon living could do it now. "Oh yes," said the old man, "I know all aboud dat, because I vas in de var myself, und I know ven dey dook off a leg like dat, dey mostly kepd id for a day or two und den buried id wid de body. Bud dat's nod vat I mean. Vat I mean is, you don'd vait dree veeks before you oberate for abbendicitis, und den don'd know vat you oberated for and only find id oud tventy years aftervards like in my case." "Hold on, old man," I almost cried, "you never could have been operated upon for appendicitis, you're too old." "Vell," he answered, "I vas nod alvays so old and dis habbened aboud forty-five years ago. By rights, I should haf been a charder member of de Abbendicitis Lodge, No. 1. I don'd know as anybody vas obened before me." "Well, Mr. Barnett, all things move in cycles," I said. "Dat's vat dey call a kinda high-brow for circle, ain'd id?" he interrupted. "Alright," I said, "if you will have it so, but one man was opened, as you call it, 150 years ago and a pin found in his appendix. The circle was a small one and soon forgotten. And then a hundred years later, they opened a few in England; but the members of the lodge didn't live long after their initiation. And then nothing was doing 'till Fitz started lodges all over the world."

The old man seemed a little impressed, but more depressed by the manner in which I had knocked from under him the pedestal of priority. But he soon rallied and came back at me saying, "Vell, docder, I could at any rade haf been a charder member of Abbendicitis Lodge, No. 2." "Alright Mr. Barnett," I replied, "but you see it's stricter there than the Back Pension business. You've got to have the facts from the beginning to the end. I guess you have them?" "Oh, sure," he said, settling himself into a comfortable position for narration. "I gif you de whole shtory und den you kin judge. Id ain'd so long, bud vile it lashded der vas someding doing all de vile. De beginning was breddy sudden und de end came near being sudden too. De whole ding began sudden in de middle of de nide wid a bain in

my shtomach. Bud such a bain! 'Sholem,' says my vife to me, 'I belief if is noding bud a heart burn.' 'Tillie,' I says, 'qvit your fooling; ve've been married togeder twelf years, und id is kinda late to git a heart burn.' Bud I dook a deashpoonful of soda yust de same. Id did no goot. Den I dook a dablesboonful of paragoric und I feld much bedder. "By de vay, docder," Uncle Barnett digressed, "vat is de madder wid paragoric; nobody gifs id any more? De anis in id schmelled so goot und de daste didn'd make you sick." "Why, Mr. Barnett," I said, "we never give opium any more; it just masks the pain for a while." "Vell I guess dat's so," he said, "because ven I vent down to my shtore in de morning de bain vas so bad again, I ashked Docder Vilson aboud id. 'Barnett,' says he, 'you god a shpoiled shtomach und vat you need is aboud dree shpoonful of cashdor oil to verk id off.' Now I knew vell enuf vat cashdor oil does und I vent home to do id. Bud I didn'd. Belief me, docder, dat nashdy shtuff shtarted my insides de wrong vay und for aboud dwo days de bain has a chance to come up wid all de oder dings; bud id didn'd.

"Id vas like von of dem elevador cabs aboud subber dime in von of de big hodels wid a roof garden—going up full, all out ad de top—going down all empty. 'Doc,' says I to Vilson, 'dat bain don'd git bedder. Id's going lower all de dime und I belief I'm shwelling up, und dat sure can't be from anyding I been eating ladely.' Vell den he feld my bulse, looked at my dongue, dabbed me over de belt line, like I vas a drum, und blayed a liddle biano on my shtomach. Den he looked vise, combed his viskers vid his fingers und said, 'Sholem, I god id now. You've god catarrh or maybe inflammation of de bowels. Vat ve need is to git de bile shtarted right wid a shtiff dose of calomel und ve chase it right trough wid some chalap—if ve don'd you're like to git de yellow jaundice.' Vell Mr. Surgeon—excuse me, I didn'd git your name. Dr. Valton? Vell, Dr. Valton, dey must haf god de bile shtarted, bud dey didn'd chase id far enuf. Den dey tried to coax id from de oder end wid a rubber hose from von of dem Babcock fire extinguishers. Bud dey didn'd make connection. Und all de dime dat bain feld like der vas some vild animal inside drying to ead ids vay oud.

Und de mushdard blasters, und de durbendine shtupes trying to ead a hole in! Ad de end uf a veek I vas in fine shape I can dell you. My dongue feld like hod sand baber. Von hour I vould shake de bed vid a cold chill und de nexd I vould shweat like if you vas shmodered in blankets in summer. I sure dought id vould be dead for me in a shord dime; und in de long hours ad nide ven comes alvays de high-dide of bain, de old hall clock seemed to be drobbing de minutes altogeder too fasd. Und den I began to examine myself. Oh no, nod for de end! Sholem Barnett nefer says 'die.' Bud I examined myself like de docders done every day—I drummed a liddle und blayed a liddle biano, bud on my own inshtrument, und I made a discovery." "What was it?" my curiosity prompted me to ask. "'Excuse me, docder, don'd you dink I should a kinda nachully dell Dr. Vilson first?

"Ven he came de nexd day, I says, 'Doc, you must haf drobbed a music roll somedime ven you blayed biano on my shtomach. Id's down here in de lower right hand corner.' Und den he feld vat I discovered—a lumb aboud as big as two fists end to end. 'Ah,' he says, 'an abscess und ve must oben id. Ubi pus—ubi incisio,' he says." "That's what Hippocrates said," I interrupted. "Maybe so," said Barnett, "bud Vilson said id first. I remembered id because id sounded like the 'ubi de, ubi da' ve used to sing at bicnics, ven ve didn'd know vat else to do. Vell, dat afternoon dey came to oberate; Vilson und old Docder Gregory und a young shtudent wid eye glasses on his nose. First dis young feller dumbed some inshtruments and sponges and a baber of bulled lind oud of a carpet bag on de table. Dey only vashed de inshtruments vonce; after de oberation. Dey den hung up two maps of de body on de vall—von vid all de shkin off, showing de muscles; de oder wid de insides showing like in de old almanacs. 'Now ve're ready for de chloroform,' says Doc Vilson afder dey laid me on de dable. 'Nod for me,' I said. 'A glass of viskey vill do like id did ven dey took a bullet oud of my leg ad Murfreesboro.' 'Vell,' says Vilson, 'if you can shtand id, I guess ve can, und anyhow maybe your heart ain'd shtrong enuf to shtand chloroform anyhow.' De nexd ding, Vilson blayed a liddle finger exercise for de lefd hand

over de music roll, und mit his righd made a cut aboud six inches long. I vas so ust to bain, a liddle more made no difference. Old Gregory pud a shponge in de vound und Vilson and de shtudent vent up to shtudy de map vid all de shkin off. 'Docder,' says de shtudent, 'you ain'd trough de muscles yet, you god to cut deeper. He'll die anyhow.' Und Vilson dook his advice. And also a chaw of tobacco before he cut de second dime. I guess id vas to steady his nerves. Bud dey nefer had to shtudy de map wid de insides showing, because before dey knowed id dey cut into de abscess und aboud a bint of madder shquirted over all dree of dem. My! bud id vas shtrong—dey must haf buried deir close afdervards. Und I laughed for de first dime in den days; bud nod for long, because Docder Gregory insisded on cowshlip boultices as de besd. 'Bud ver in de vurld,' my vife chimed in, 'kin I git enuf cowshlips for boultices?' Oh, I don'd mean de liddle yellow flowers ad all,' says Doc Gregory. 'Vat I mean is de cowshlips you shtep in ven you valk in de pasture und shtudy de clouds.' Und cowshlip boultices id vas for me. I shtill can see my liddle nigger boy Choe, sitting in frond of de door wid a shovel by his side vatching de cow in de lod. He vas someding of a shprinter, vas Choe, und vonce I saw him cetch de shlip before id culd dake root in de ground. Because id vas a dry summer vidoud much grass, dwo neighbors sent der cows ofer in my lod. Now vasn'd dat kind of dem? Vell, for aboud a veek, dat boy Choe was like de lookoud on a ship, looking for de first shpar shtanding oud on de horizon. How I did enchoy de schmell of shveet red clofer in my neighbor's field, and de new cut hay—and de mignonedde in my vindow-box—how I did enchoy dem!—de nexd summer. In aboud a veek dey pud Friar's balsam on de vound, und den someding like a piece of flat macaroni peeked oud of de vound—und Doc Vilson bulled id oud. Id vas aboud as long as my finger. Id dook me tventy years to find oud id vas my abbendix."

"Now," he turned to me, "are you sadisfied I coulda choined Abbendicidis Lodge No. 2?" "Surely," I replied, "but have you any evidence?" "If dat's all you vant, I've god de document on parchmend." Whereupno he showed me the scar;

white, irregular, glistening and in the southwest corner of his map. "Uncle Sholem," I said admiringly, "you must have been pretty happy after that long sickness. Hippocrates says, 'the happiest man is he who has just recovered from a severe illness.'" "Docder Valton," he replied, "dat's de second dime you've named dat feller. As you said a vile ago, 'ding's move in circles, und I guess Mudder Eve said aboud de same ding right afder she heard liddle Cain's first shcream. I vish she'd killed him right avay. Ve anyhow god too many of his breed in Kentucky." As I rose to say good-night, we shook hands and I could not help saying, "Uncle Barnett, may I present you to my friends at the Literary Club some night?" "Vy, of course," he acquiesced, "bud id must be some dime in de den days between Rosh Ha Shono und Yom Kippur."

SUMMER ALONG THE
WHITE ROLLING SANDS

SUMMER ALONG THE WHITE ROLLING SANDS

SINCE man became civilized he has felt, or thought he felt, the perennial need of change and rest. The animal and savage alone seek no release from the thralldom that belongs to every form of life and being. Egypt, Greece and Rome had their spas, mountain and sea-shore resorts, very much like those of to-day. They were unfrequented by the tiller of the soil, the maker of brick and the artisan as are ours by the man who from morning to night feeds leather to a machine and turns out shoes, the average mechanic or professional man. Economic conditions are changing, and for the better; but for the multitude they have not lifted the irksomeness of work without rest or change. The monotonous struggle of the individual goes on as in the beginning. Time and place may change its phases, but on it goes seemingly without end. These reflections, not new, come to me more than once on my summer outings, which, for a number of years I have taken near Penetanguishene, a small village of the Dominion.

The saw-mills, the electric plant, the water-works are all owned by W. B. & Co., Limited. The hands live in hovels and are partly paid in script—good at W. B. & Co.'s stores but nowhere else.

The Dominion of Canada is larger than the United States. Its population is less than seven millions. Nevertheless, the relations of capital and labor are the same as south of the border line. Fifteen miles from Penetang there is the deserted village of Muskoka Mills, a picture of desolation; more than a mile of docks going to rot; thirty or forty cottages untenanted, with white-washed walls still glistening in the mid-summer sun; the capacious mill-sheds, log chutes, benches, belts, arc lights all in place, but rapidly succumbing to the elements. During fifteen years this was the largest saw-mill in Ontario. Out of it a lumber king made his millions. It ceased to pay. The lumber

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king still had his millions. The operators lost their modest homes. Here is the tomb of a gigantic industry, its dirge forever being sung by the falling waters that were its life, once.

Pessimism rampant on a summer outing, you will say—not so. It is but the aftermath of a year's work in a profession before which more than any other the trials and miseries of life are laid bare. Go as far as one may and he cannot escape from himself.

I go to Penetanguishene because it was a hotel which is good at $14.00 per week, but would be poor at $15.00, for its opportunities for acquiring a golf arm, a tennis leg or from injudicious diving, a burst ear drum, and most of all because of the excess of water over the contained fish so much time is consumed in searching for them. Next to catching fish as a source of unalloyed pleasure is the act of fishing. A shady nook among verdure clad rocks, a sky slightly overcast. The watery expanse just ruffled by a breeze, a friend in the boat who values the companionship of silence and the suspense attending the approach of the victim make one forget all but the business in hand.

If you are "yokel" enough to fish with gaudy floater you will watch the bob for minutes at a time. It is like the jewel of the hypnotist. You are thrown into a veritable trance from which nothing will wake you but the strike of a fish. The living actors of the scene about go all but unheeded.

The noisy squirrel in the boughs overhead, or rattling among his hoarded acorns, the gull, silent and motionless on yonder rock, the little brown mink scurrying along the water's edge or perchance a water snake carrying a lizard to its lair; they all enact the incidents and tragedies of their worlds to a listless audience.

A rock bass, a sun fish or a little two-ounce perch can better break the spell, to say nothing of the noble bass or muskelonge. Finny tribe is by nature shy. They can see a boat and its occupant. They saw my companion, Dr. Nimrod, for three consecutive days before losing their coyness enough to steal bait from a hook.

On the fourth day my friend was rewarded by the catch of a rock bass. He also learned that the weight of a fish in the water could be read by the scales on its back. On the fifth day, so his story goes, he enacted the piscatorial Good Samaritan. While strolling along shore he observed a commotion in the water three or four rods away. He ordered his boatman to heave to. He found a twelve pound muskelonge belly upwards, lashing the surface of the water evidently in the death struggle. Lifting him into the boat he found a one-half pound goggley caught in his gills.

With the dexterity begotten of long professional training he removed the imprisoned offender, saved both fish, and returned them to their element. Fish are said to be dumb, indeed devoid of every expression; yet the Doctor claims he saw a never-to-be-forgotten look of gratitude in the eyes of those fish.

The writer discovered Penetangiushene five years ago. It might be as well to admit that it had been discovered before. In fact, five years prior to the epochal landing at Plymouth Rock, Champlain visited the Indians about Penetang Bay, the southernmost arm of the Georgian Bay.

It was hence along the north shore that he and his intrepid companions and followers carried the explorations that led to the discovery of the Great Lakes and later of the head waters of the Mississippi. The founder of Quebec pushed far into the wilderness and the Jesuit Fathers followed, "For the glory of France and the greater glory of God." White men had not yet seen the Niagara. They came from Quebec by way of the St. Lawrence and French Rivers into this Georgian Bay.

Gliding in and out in their bark canoes among the thirty thousand islands of the north shore, and past the Giants Tomb, they saw over the wide reach of waters a great bank of white sand running to the water's edge and gleaming in the noon-day sun. It was a land-mark for the Huron, Ojibaway tribes and, in the language of the latter, was called Penetanguishene, "The Place of the White Rolling Sands."

The legend of Hiawatha sprang from among the Ojibaways and Hurons. Even here he might have waited

"With his hands extended
Held aloft in sign of welcome,
Waited full of exaltation
Till the birch canoe with paddles,
Grated in the shining pebbles,
Stranded on the sandy margin,
Till the black robed chief, the pale face,
With the cross upon his bosom,
Landed on the sandy margin.
Then the joyous Hiawatha,
Cried aloud and spoke in this wise
'Beautiful is the sun,
Oh, Strangers, when you come so far to see us,
All our town in peace awaits you,
All our doors stand open for you,
You shall enter all our wigwams,
For the heart's right hand we give you.'
And the black robed Chief made answer,
Stammered in his speech a little,
Speaking words yet unfamiliar,
'Peace be with you Hiawatha,
Peace be with you and your people,
Peace of prayer and peace of pardon,
Peace of Christ and joy of Mary.' "

Within four miles of the Penetang of to-day Champlain with Father Caron, the Recollect missionary amid the strange and weird surroundings celebrated the first mass in the Huron country on the twelfth of August, 1615. Probably France then took possession in accord with the usual process verbally, "In the name of the most high, mighty, redoubted Monarch Louis XIII, of that Most Christian King of France and Navarre, I take possession of this place, also the islands here about, and all countries, rivers, lakes and streams contiguous and adjacent thereunto; both those that have been discovered and those that may be discovered hereafter, in all their length and breadth

declaring to the nations thereof that from this time forth they are vassals of His Majesty; bound to obey his laws and follow his customs, promising them on his part all succor and protection, declaring to all other potentates, princes, sovereigns, states and republics, to them and their subjects, that they cannot and are not to seize or settle on land save under the good pleasure of his Most Christian Majesty; and of him who may govern in his behalf, and this in pain of incurring his resentment and the effort of his arm."

"Vive-le-Roi." But the king did not live. "And what remains of the sovereignty so pompously proclaimed save in the province of Quebec? Now and then the accents of France, distorted by Indian admixture on the lips of loggers, straggling boatmen or vagabond half-breeds.

In Penetang Bay, within ten minutes row of the hotel, lies Magazine Island, with an area of less than ten acres. On it are the ruins of an old block house built during the War of 1812. In the channel to the left are the wrecks of two English gunboats dismantled and sunk in accordance with the agreement to keep the lakes clear of war ships.

Women and children fish for perch and sun fish among the sunken timbers, perhaps wondering at the tales of adventure on sea and land its hands might have told.

Yet on the shores of the Bay directly opposite in a clearing at the junction of two creeks were inaugurated fifteen years of history replete with acts of bravery and martyrdom, such as came through hope neither of gain or of glory, but through faith alone. For here lay the large Huron town of Ihonatiria.

Here in 1634 came Father Brebeuf. Here was built the first Jesuit Mission on the great unsalted seas of the north.

Here is the spot sacred to the Bark Mission chapel, with its wonderful partitions, the mysterious clock that chimed the hours of day, and the sacred vessels and the vestments so strange to savage minds.

Here was the center of Indian conversion, from which trails led to eighteen towns and villages. Baptisms were few and far between. First the children, then the infirm and dying, then those in the bloom of health.

Changes were worked slowly. The Huron houses two or three hundred feet long and occupied by twenty or thirty families were for the first time partitioned off so that some sort of privacy was secured.

With the conscience was developed the sense of shame and morality. In these vast human tenements the marriage laws had been lax. "The practice had prevailed of temporary or experimental marriages, lasting a day, a week or longer.

This provisional marriage was no bar to a license, boundless and apparently universal unattended with loss of reputation on either side.

Every instinct of native delicacy had vanished under the influence of Huron domestic life where many families had been crowded into one undivided house and where strangers were free to enter at all hours of the day or night.

The Huron woman when not a mother was a wanton; she then became a drudge. The advent of the Jesuits put an end to this open licentiousness. The burial feasts, orgies recurring every twelve years, were abandoned. At these feasts the bones of all who had died since the last feast were removed from their temporary graves or scaffolds. They were gathered from all quarters of the compass, carried in bundles like fagots, to a given spot and buried in one vast pit. One of the last occurred at Ossassowee near Penetang Bay.

Christian burials were instituted; a savage people was becoming civilized; a nation came near changing its faith. But faith could not ward off the calamities of pestilence and war. The plagues and the terrible inroads of the Iroquois drove people and priests from the region of the White Rolling Sands to shifting resting places on the main land and on the islands. The arduous toil and the deprivation of fifteen years had availed nothing. Brebeuf and his followers became martyrs indeed, for they died at the stake after untold tortures had been inflicted by the savage Iroquois and apostate Hurons.

Of 20,000 Hurons, 400 converts remained. As refugees they were taken by stealth to Lorette near Quebec.

As a people the Hurons died out and with it the Jesuit Mission. The "Peace be with you, Hiawatha, the peace of Christ

and the peace of Mary," came not; in its stead, desolation and death.

The most imposing structure in Penetang is the Memorial Church. The corner-stone was laid in 1883 in commemoration of the martyrs who perished two hundred and fifty years before. Visitors of the Hotel Dieu of Quebec are always shown the silver bust of Brebeuf. In its base is a little recess containing the most sacred relic of the place, the skull of the intrepid leader of Jesuits in Canada. The visitors of Penetang still see many Indians who live on the reservation at Christian Islands twenty miles away. The squaws are fat and ugly and usually wear cheap prints and straw hats. They sell baskets and bows and moccassins.

The bucks in cast-off modern clothes gather blueberries when they are not drunk. They never heard either of the Hurons or the Iroquois; they came from some inferior tribe of the Lake Superior region more than a hundred years after the last of the Hurons had turned his back on Penetang and the Georgian Bay.

The latter history of the Village of the White Rolling Sands presents nothing unusual.

An interregnum of more than one hundred years before the white man had again appeared; first a trading post, then a military station and gradually the influx of a few "voyageurs" from the province of Quebec after its fall, and a few of the 20,000 Tories who crossed the border rather than live under the new order of things following the revolution. Those of Anglo-Saxon lineage ruled the place. Only one French name appears among the twenty or thirty business places. I learn from the Curé of the Memorial Church that there are many families of French extraction in the surrounding country. The loggers, the fishermen, and the guides are almost all of French and Indian stock.

Indeed, the blood in their veins is so variegated that it were fruitless to follow each strain. They live in little cabins on the water's edge across the bay. Among themselves they speak an argot which even a Frenchman cannot understand. In the winter they cut wood and fish through the ice for pickerel and salmon trout.

In the spring they run logs into the river; in the summer they act as guides and in the fall they go north one hundred miles or more to pick bush cranberries for the markets.

They are a rugged lot; trained from boyhood for hardships; passing night after night on the soft side of a board with the elbow for a pillow is a feat which they have all acquired.

The average guide when ready for service is ready for bed when he has taken off his boots and his cap.

In the morning his toilet is done when he has replaced them. Still one begets a fondness for his guides in the course of a few years. I will confess that Pentangue would not be the same with Captain Hoar and George Perault not there to say "B'Jour" or "How are you." George Perault is a particularly splendid specimen of the Canadian, of French and Indian blood. A little over five feet eight inches in height, he looks shorter because of the width of his chest and shoulders. His cheek bones are a little high, but his nose is straight and far too narrow for one with much of the Indian in him.

George's hair is striking, straight and coarse on the sides and back, it is fine and naturally curls over the temples and brow.

George cannot raise much of a mustache, though he is above forty. There his Indian blood comes in. He will pull a boat all day against a wind without tiring; with his shirt opened baring his bronzed throat and chest and the sweat stained scapular, he inspires me with a feeling of safety when he plies the oars.

George has been married but a short time, but he has living with him a sturdy little lad of seven or eight years. George is reticent, almost stolid. He may be lured to talk about deer and wolves, logging and fishing, but rarely of himself or of little Pierre whom he seems to all but worship. I have known George for five years, but it was only a short time ago that he told me the story of Pierre and himself, concerning which the gossips of the place had various versions. Perhaps the time and place made him mellow, for it was at a camp-fire at the foot of Muskosh Falls.

The evening meal, rather full, had been dispatched, the rush-beds in our little tents had been arranged and our pipes lighted. Some indifferent remarks of mine had started him.

"Say, Doctor, yue zink lak all ze rest as I be ze father of little Pierre, but I ain't. I wants to be if God will let me. Es fathair 'ewas Pierre Michaux. He was a fine feller. Mat him firs on Moon River zirty miles up ze shore.

Us were loggin in ze river, breking up a jam. Ze wind was comin down ze stream laik hell. Every minit ze logs he get tighter and tighter. I dunt know how it come about, but I slipped and down I come 'tween ze logs.

O, ze water was only up to ze holes in my arms. Right away I was on my feet. Zat come often. When de wind don't blow, zere ain't no danger fer a strong man; he kin keep ze logs away from haes head and breas.

Well, Doctor, I zought fer a minute it was all over with me, but Pierre was there. I see him straddling of a big hemlock log holdin one of ze jam with hees legs, while ze other end he hols with his pike. Pierre he look pale but he sez nothin; neither me nor him could move.

When help come in ze bout quarter of an hour I was all right. Mais Pierre he hev his leg smash above ze knee. He was always bad lame after that and no good no more for running logs. From zat time us was always together; in ze woods or on ze ice, in ze house boats or on sail boats med no difference, us worked soid by soid all ze time, 'cept when ze run ze logs in ze rivers for making a boom. For two years before he was married when us wuz home he had a baid in my mother's cabin. One day in winter long 'bout dark I'se come to de shack from fishing through my hols in ze ice. It was near Go Home River.

Pierre he gone before to het wood for ze fire. Zere was him on hees knees 'fore a little bundle rubbin it hard as he could. 'Voila George,' he say 'What me find in ze snow, a pretty mouf full for a wolf." It was a little Indian fillette mebbe two, mebbe three years old. Some scare old squaw she lef that bebe', mebbe it was sick, in ze woods fer to die, and it come pretty dang near it. Well we worked with that young one all night. In ze mornin I says to Pierre. "Pierre we got nough

fish fer a loda fer Penetang. You take zem in ze slaid wiz ze dogs and sell them, and ze bebe' you take to the Curé, M. La Boreaux, for to baptize. Him have a good sistaire, pauvre sister of Monsieur Le Curé." She be paralized now; she walk no more; you kin see her in her chaise wiz wheels. She was good woman. Well, when Pierre he come back he have only one-half ze money fer ze fish what belongs to me. What was his own he gif to ze sister of M. Le. Curé. 'Pierre,' says I, 'zat was not right; I want to pay fer half ze bebe." 'No,' he make me answer, 'I find ze bebe and I cares for he all alone. You have mozer and sistaire. Mebbe you git married some time; not me wiz ze bad laig; you shut up 'bout that now, Prenez.'

Well, Pierre was red hot laik a stof. I know'd Pierre; when he was laik zat I always let him be. So zat waz ze way all ze time.

Foe fifteen years mos of what he made Pierre he gif to M. Le. Curé and zat bebe.

Well, she grow up fine; when she was confirmé she waz ze biggest of zem all. She was like a young sapling in winter all white.

Pierre, he see her every Sunday after mass when he waz home. Bebe was baptized' Marie,' but Pierre he always called her Manna what was ze swan, Manna-Haha, ze swan what always laughs. She was so fine and tall and smile always. Oh, us all love her but none like Pierre. Uz don't think of givin her a Indian name side Marie. Pierre always dreamin; in ze day too.

Well, time go 'long fast. You might know what come. Ze Curé and his sistaire was making out how good was Pierre. She was lovin him all time but not like zat. Well, ze was married in ze big Church; no marriage like zat before or after it. You see everybody love zat girl and knows 'bout Pierre.

Ze was married on Monday after Palm Sunday; ze hav ze long mass at eight o'clock; but ze church it was filled to ze doors; everybody sent flowere and candles, even Mrs. Johnson, what waz ze wife of de Mefodist minister.

Manna she looked handsome dres all in white and a wampum of whitem beads for belt. She had glovs of silk zat was made by ze sistaire of M. Le Curé. In her han she carry a brevaire

an chaplet zat ze Curé sent from Orilla, zay was blest in Rome by ze Holy Father himself in San Pierre.

And Manna she fast ze noight before, foe zat way is ze way de do in ze Catholic Church, but she look fine.

Her brown face and black hair stood out against ze white of her dress. Pierre he looked kind of foolish so much older zen Marie, and when they kneel before ze autel for blessing he look funny cause he couldn't bend his bad leg. Nobody notis zat. When ze Curé ze bless them zere waz water in hees eyes, and ze mussic what filled ze church filled ze whole place laik wiz joy fer everybody.

When ze people left ze church zere was a grand fete at ze house in ze garden of M. Le Curé.

Tere was eatin and drinkin and dancin nough fer everybody, and when dark night come moct ze whole village went in ze boats and canoes 'cross Penetang Bay to ze new home of Pierre. We all help to put up zat little cabin. You can see it yet near Jim Landrigan's house. No one lives zere now fer near seven years. Well, ze was happy nigh on to three year.

Soon little Pierre he come, and then Pover Pierre was proud. Nosin was too good fur his woman and his boy. In mean time, my mofer she die. Then we lif with Pierre in his cabin. I see some change goin on in Pierre's woman by and by.

She don't seem like lafin so much and even p'tite Pierre he couldn't make a smile come all ze time. She was good laik always and worked, but zere was somefin strange about her.

Many a time I see her look for maybe an hour at a time over toward Beau Soleil what is in ze north. She seemed not to know what was goin on 'bout hair, laik almost as if she lif'd in a dream. Pierre he noticed it too, but say nothin.

Well, one summer day me and Pierre was up together in a houseboat 'bout four weeks and when we come back together Manna was gone. P'tite Pierre now 'bout one year old he was at Landrigan's. She leave no note for Pover Pierre, for he can't read. Mrs. Landrigan she say as mebbe Marie went to Indian feast on Beausoleil Island ze night before Pierre came home.

Fer tree or four days she said Indians was comin from Penetang and Lafantine and Wabashene and Mesodis' Point and Christian Island.

Ze come by ze roads and in ze canoe sand ole sail boats, all goin to ze big dog feast on Sosley Islan.

Mebbe as she sought as Pierre went zere too. Pauvre Pierre he looks as if he was dead. Not when he smaish ze leg 'tween ze logs twenty years before, was he so white laik zat. He say to me, 'George, you take care of zat bebe, I find my wife,' and wid zat he go out. I never see him after zat. All I know is zat zey found ze poor Indian woman strangled at ze end of Bouslay Island.

Well, I was married 'bout two years go to a woman from Lafontain. I tol my wife I want her to take care of Petite Pierre because hees fozer he saf my life. Zere was another reason, I lof little Pierre's mozer but I don't tell my wife zat."

The fire had burned low when George finished his story and we turned in, but it was long before I could sleep, not because of the rustle of the porcupine among the leaves without or the laugh of the loon or the wail of the wild cat, so much like that of a man lost in the woods, but I could not sleep for thinking of this story of Pierre.

If death knocks alike at the palace of the rich and the hovel of the poor, it is preceeded in both alike by passions that bring joy and sorrow, passions that are ours a thousand years before we are born.

A few weeks later while trolling lazily in a boat pulled by Ernest Ore, the son of the gossiping captain, Ernest said, "Doctor, see that house, Tha's where Pierre Michaux lived. He killed his wife. They say it is haunted. Every night Pierre's wife comes to look for Pierre. Do you think a ghost knows much? Well, I don't. If that ghost knew anything she wouldn't come here looking for Pierre; she would go to the asylum for the insane at Toronto.

CLAIGHORNE

CLAIGHORNE

THE casual tourist on the continent devotes a week, or at most, ten days, to the Austrian capitol. In a day he does the Hofburg and Schoenbrun, the Prater and Imperial Galleries. He spends an hour or two before the treasures of the Schatz Kammer. If he is young and of sound heart, he climbs to the top of Stephen's Tower, and under all circumstances takes the Cog-road to Kahlenberg for a bird-eye view of the city and of the beautiful blue Danube, and last, but not least, for a Wiener Schnitzel. The nights he devotes to the opera, grand or bouffe; to a Strauss concert or a play at the Imperial Theatre, than which even the Comedie Francaise is not greater. If he be inclined to seek them, there are playhouses without number, whose demerits are all the attraction; for the tingle, tangle of the German is the forerunner of the vaudeville.

But the really unique feature of imperial Vienna is passed without notice. It is the Koniglich-Kaiserliches Krankenhaus, the Royal and Imperial Hospital, the Mecca for all graduates in medicine who have the price. The seven laps of the pilgrims about Kaba in the court of the Mecca Mosque wear out less shoe leather than the nine courts of the great Hospice, housing nearly 3,000 sick and maimed. And the leather is brought there from all parts of the world. What a place the Riedhof was in '76! Verily the most cosmopolitan spot on earth. When entering this famous hostelry near the hospital, the impression was one of Babel disinterred.

Away from home a man naturally seeks out his compatriots; he so overcomes homesickness. Therefore, at the Riedhof twenty different tongues were spoken at as many different tables. Language rather than nationality formed the groups of men. Russians, Germans, Italians, Dutch, Danes and Turks; Japanese, Poles, Czeks and Magyars were seated by themselves; but Brazilians messed with Portuguese; Cubans

and Mexicans with the Spanish; and the dark-skinned Algerians and Abysynians foregathered with the French. The largest table was ours. An enormous round affair around which would be seated Americans and Canadians, Irish, Scotch and English; Australians, New Zealanders and East Indians. And here we came to know Claighorne.

The potentialities for merit and varied experiences were great at our table, for most of us were young but minus opportunity. Claighorne was different. He was all actuality. There was nothing of the doubtful about him. Perhaps our respective beards would serve to illustrate the *status quo*, for all of this was at a time when beards were cultivated. Claighorne's was the only one at the table that seemed a fixture. It was of the length, color and texture that Kaulbach and Piloty delighted to give their Norse and Saxon heroes. There was none of the weakness of the patriarchal beard of the Italian school. It was of an unequivocal color; red except at the tip, which was slightly streaked with gray. The heavy mustache and projecting eye brows would have given a sinister expression to Claighorne, but for the merry twinkle of the gray eyes that spoke even when the bewhiskered face was silent. Perhaps it was because Claighorne was a Scot, born and reared in Aberdeen, that he believed in the beard's portending strength, and in India his inborn respect for the beard had doubtless been fortified. For Claighorne had been attached for over ten years to the ———— force of her Majesty's possessions in India. He had seen much service in many parts of the vast colony. In the crowded districts of southeastern Bengal, on southern slopes of the Kheber Passe, on the banks of the Indus and in the vastnesses of the Himalayas, Brahmin, and Rejput; Mohammedan and Outcast had been made the subjects of his observation. He had studied the introspective Indian and learned from him many things and much.

For example, vegetarianism was a doctrine with Claighorne. But he eschewed neither steak, nor carp nor the toothsome goulash. "Why not practice what you believe?" said Martin of Boston, when we got better acquainted. "Because," said Claighorne, "I am a Scot and Presbyterian, and above all, I am

in Vienna and must live." A good-natured laugh greeted this amend of the best appetite manifested at our table. "Chaff me if you will," said Claighorne, "but the Hindoostanee is right in theory; 'In all things living there is a soul.' Spiritualist and materialist will come together in the primordeal cell, and in its protoplasm they will find the radicals of soul life. The barriers between plant and animal are now being razed. Perhaps we will revert to the philosophy of Democritus twenty centuries old and see a soul in all matter. Why not? Like living beings even stones are influenced by outward conditions; they are moved, react to heat and cold; their elemenal atoms according to their kind attract and repell. We have repulsion or affinity; and what are these but soul qualities developed as we ascend the scale from the inorganic to plant and animal life and most developed in man." Claighorne was almost prophetic, for less than a year ago Prof. Chunder, of Calcutta, gave utterance to analogous views in a highly scientific treatise. You could not get Claighorne to witness a vivisection. With the subtler reasoning of the Orient, Claighorne had acquired many of the tricks of the fakir. He amused and entertained us with them when things were dragging. At hypnotism and mind reading, so called, he was an expert. When those clear gray eyes were fixed on you, it was all up. Your inmost thoughts were as an open book. In the wards of the hospital he would nail a malingerer every time. What wonder, therefore, that we admired Claighorne! That he seemed affluent and had an open hand, did not detract from his merits. We smoked stogies unless it was Claighorne's turn. Then Bock's or Upman's were none too good.

There was but one thing about Claighorne that palled. He was given to preaching. Vienna was doubtless a first rate field. Day after day he pointed out its iniquities. He damned the sordid motives of the press in abetting immorality. "Look at the personal columns of the Tagblatt and Zeitung," he would say, and thereupon, day after day he would read the "wanteds" of men and women, subterfuges all and thinly veiled if veiled at all. One day the readings, grown quite tame by their sameness, came to a sudden end. Claighorne had opened his paper,

fixed his glasses, sought out the well-known column, flushed, became confused, folded and pocketed his paper. "Hello, old man; what's up? Anything personal? Hungarian, Czek or what, old fellow?" were a few of the fusilade of questions fired at poor Claighorne. Like a lamb he handed the paper to the man at his right. There it was in cold type, heading the column. "Wanted by a woman of quality, the acquaintance of the distinguished Briton with sandy beard, who dines at the Riedhof, with a view to mutual improvement in languages. Answer R. F. this office; three times, Thursday, Friday, Saturday." Brunton, of St. Bartholomew's, broke the silence. "What an extraordinary opportunity, and how cheap! I pay two guldens an hour for my German." "Right you are," chimed in Barrow from Toulane. "Claighorne, I reckon you've got a bargain. What are you going to do with it?" "Beware the temptations of St. Stephen," said Cunningham. He was from Trinity College, Dublin, and generally got his scriptural allusions mixed. Claighorne, the senior of everyone of us by at least ten years, seemed hurt. He left the table without a word. He dropped us altogether. We saw him, of course, at the clinics, in the atomical rooms and at private courses; but all social relations were at an end.

Had he succumbed? Most of us thought he had. I held out for his integrity, perhaps because I knew him best and our relations had been very close. Yet I shared his cold courtesy with the rest. I felt aggrieved. After a week of silence, I determined that Claighorne must explain. I sought him in his rooms. He was out, but on his table my eye at once fell on an additional to the well-known articles. Resting on a little easel was the picture of a woman rather young, certainly beautiful and Hungarian. Figure, style, pose of head and the shade of down on the fine upper lip proclaimed the Magyar. Silently I mused before the siren of linguistic bent, and my musings came to this, "Claighorne, old boy, this is bad, bad, very bad; but it might be worse." I did not wait for Claighorne. I felt that I got what I really had come for.

It was Mardi Gras and Hurst's birthday. Of course, we would go to the ball at the Volk's Garten. We might get a

chance to see Franz Josef and be almost certain of a hand shake with Prince Rudolph. But there was ample time for a short dinner at Hurst's new apartment at the Metropole. He had occupied it but a day or two. It was not an exclusive affair. It was our table of the Riedhof embellished with flowers, with finer napery, eatables and wine. It was our table of the Riedhof, but it was minus Claighorne; yet his name was in everyone's mouth. Had we heard of his remarkable hypnotizing of old Riedart, who held the record for epileptic fits, fifteen or twenty in the day. Four days ago Claighorne used suggestive treatment and there had not been a spasm since. "And the wonderful thing he had done in Billroth's ward with the peddler brought in unconscious with a crushed skull," said another. "Claighorne simply passed his hands a few times over the forehead and temples fixing his gaze steadily on the dying one. He made him reveal how he came to his injury. Of course, it was not evidence; but it gave the first and right clue to the police." When the matter of the "personal" came up, as of course it did, I held my peace.

The coffee served, our host arose. There was a quizzical smile on his face as he called for silence. He drew from his pocket a little bundle of letters and a few packages. We were all anticipation. "My friends," he began ,"we all loved Claighorne and admired him. His going from among us has overcast us with gloom. I have here some letters and things which, to use a legal term, I might call exhibits which throw a light on our friend's unusual conduct. With your permission I will lay them before you seriatum."

Exhibit 1. A Letter.

Reiter Strasse 10.
Josefstadt, March 1, 1876.

Dear Madame—

Much as your "personal" vexed and embarrassed me, I feel just a little pride in your having selected me. True, I am not entitled to much, for the choice was easy among the lot of insignificant chaps with whom you must have noticed me. For this favor I am under obligation, which I would begin to pay at

once by a belief in your sincerity and by influences which are altogether to your credit if substantiated as they doubtless will be. I am somewhat of a sleuth Sherlock Holmes. I infer that you are madame, for even here maidens shun personals. I further know that you are well to do and generous; three insertions where one would have answered—and that in parsimonious Vienna. Therefore a sordid motive did not cause you to seek me out. Of course, you are of quality, presumably fair, reasonably youthful and without irksome ties. A sham on any of these points would be detected at once and fatal to our cult of languages. My last inference for the present is that, like myself, you are a stranger in the city with a modicum of sparetime for self-improvement. Let us waste as little as must be in preliminary parleys.

Yours respectfully,
John Oliver Claighorne.

P. S.—Under separate cover I send you my photograph Study it at your leisure. All I ask is yours in return.

Exhibit 2—A Photograph of Claighorne.

Exhibit 3—A Letter.

Reiter Strasse 10
Josefstadt, March 14, 1876

Dear Madame—

You must belong to the 400—you are so prompt in your correspondence. But I do not take kindly to your suggestion that the writing of letters is one of the best means of acquiring a language and that we continue it for a while. Why did I write my last in French? Because I would not in English and could not in German. I have a style of German construction all my own. When I apply it in conversation, I understand fully what I am saying, but have very great trouble in making others understand. That is just what I would want you to correct; and to this end our relations must be rather closer than can be had through a five penny postage stamp. Apropos, you might reveal your identity and give your real address; twelve hours, at least, are lost by having to send it care of Tagblatt.

How amiable you are to comply with my request for your picture. I have it ensconced on my study table. I sit admiringly before it and am convinced that letter-writing won't do at all. Enclosed you will find a spray of mignonette broken from one that I have placed about your picture. You must be like mignonette, sweet, graceful and pleasing. For Mignonette I am crushing between my fingers, the better to get its scent.

Yours devotedly,
John Oliver Claighorne.

Exhibit 4—A Sprig of Mignonette.

Exhibit 5—A Bunch of Violets.

Exhibit 6—A Letter.

Reiter Strasse 10
Josefstadt, March 28, 1876

Dear Madame—

For more than a week I have been downcast and gloomy, all because you were silent. I feared that my last was a trifle impulsive. How good of you to dispel all my anxiety by your sweet note of this morning. So we are to meet on this of all days the gayest of the year, Mardi Gras. What a pretty sentiment you have implied in naming this day. A bunch of violets will scarcely requite it, but I am going to try. Will nine o'clock at the Metropole meet my convenience? Of course, if that's the earliest.

The reading was interrupted by a knock on the door. The "Herein" of our host brought a waiter with a card. Hurst looked at it for an instant, smiled and exclaimed:

"Exhibit 7. Claighorne in Persona Propria.

He lost no time in following his card. An uproar of laughter greeted him and he seemed to bear it with extreme good nature and equanimity. Indeed he laughed with us. The denouement was such a farce. But you could not cure Claighorne of protesting. With the first break in our hilarity, he raised his hands to command attention. "Boys," he said, "hasn't this been a trifle onesided? Perhaps I knew of this before the trap

was set. Perhaps it was a case of clairvoyance helped along by a word or two let fall by Hurst in the Throat Clinic within the hearing of Clara, who likes me a little. Just a few, such as, 'Claighorne makes me tired.' 'Personal, Riedhof, Sandy Beard, Tagblatt.' May I present what might be called in legal phrase, 'An Exhibit?' "

He hastened to open the door and ushered into the room the Ex-Machina, Clara Brugge. "Unsere Clara! Unsere Clara!" we all shouted. There she was; fair, fat and sixty if a day, beaming a nod of recognition on each familiar face. For thirty years she had contributed her mite towards ameliorating human suffering as a willing subject of the throat clinic. Countless beams of light had been shot down her throat. And what a throat it was! Her great vaulted palate proved the Greeks right in calling this the firmament. And what a larynx! Trilby's must have been a music box in comparison. Without tiring she sang forth in ringing tones her aa-ee-aa-ee, and the thrill of those vocal chords when in laughing made you feel good for the day. Had she not taught cunning to the hand that brought relief to an emperor it could not save?

You must be on the Great Level Plain by now, Clara. Mayhap when my time comes, I shall hear in clear ringing tones your aa-ee-aa-ee. You must be there, Clara. You are wanted for the good of the Celestial Choir.

A ROMANCE OF LA SALPETRIERE

A ROMANCE OF LA SALPETRIERE

I.

FROM the hot corn bread and the three-year-old home-cured hams of Lewis County, Ky., to the French bread and Creme d'Ysigny of the Boulevard St. Michel, in the Latin quarter of Paris, is a pretty long jump; particularly for a man who was never in the jumping habit. Many a time Dr. Marshall Randolph had felt the desire to travel, said to be innate in every human breast. He often thought that like reason, it distinguished man from the lower orders of creation. The wild fowl may wing its way across half a continent and the lobster and the crab creepingly change environment the fraction of an inch at a time. With them it is the eternal law of struggle. Man alone elects to seek new scenes when released from the strife for the necessaries or luxuries of life. Unhappily to most men there comes no surcease from toil and their only journey is to the bourne of which the poet speaks, and is rarely a matter of election. Not so with Dr. Randolph. In one sense it really had not been a struggle at all that kept him for nearly half of his allotted years within the narrow pale of pastoral content. Cares for the "nervus rerum," vulgularly called money, he had none. His was a family cross.

He was a lineal descendant of one of the seventeen children whom a great justice's father brought over the mountains from Virginia or begot after getting there. His father fell on the right side of Missionary Ridge before the boy entered his teens. Yet from him he inherited the sturdy, physical and mental qualities which characterize so many men and women in that section of Kentucky.

His mother never recovered from her bereavement nor the vain regret that since a sacrifice was to be made that it was not in the losing cause. What she lacked in strength of character, she had to excess in temperament. Like many another with nervous "anlage" hard hit by disaster, she failed

to find her balance. Brooding, she shrank, as it were, into her shell and sought rest and oblivion in drugs. She found both with the usual result. Insidiously the habit grew on her until, like all slaves of the habit, she was sufficient unto herself. Save for and with her boy, she had neither affinity nor affiliation.

It was long after he began the study of medicine that Randolph wakened to find the weight of his woe. His every effort to lift his mother from her thralldom was futile; but failure only made stronger the love he bore her and the chivalry that was in him. She never knew the depth of the shame he felt. Like everyone with an ancestry that amounts to anything, he believed in race and in blood; and therefore, dreaded the heritage that might be his.

When his college and hospital years were over, he hastened to her. Though he yearned for a larger field, he ministered to the needs of the community in which he lived with a high sense of duty. The road was never too long nor the call untimely. The misery under his own roof-tree attuned his heart strings to that of others, particularly when caused by like human frailty. And man for man there was at the time of which I write more of that among the rural people. Hardships are so real in the country and mental diversions so few. He loved his people and they all but adored him. There are many William McClures the world over and he simply was one of them, although still on the sunny side of thirty.

His best faculties he centered on the nervous system. So far as books and the limited opportunities of a country practice permitted, he learned to know it in health and disease. Inherent weaknesses and acquired habits that make for desolation became the special objects of his study. The belief is current among medical men that the heart specialist distrusts his own little pump; that the surgeon is forever mindful of his appendix and that the nerve specialist has nerves that are all but palpable. Not so with this man who, at will, could lift himself above his surroundings. He found recreation in hoeing corn, and in helping to set out tobacco. He loved the smell of burning leaves and brush in the fall, and sought the first violet in the spring. Like a woman he loved the many-hued glories of his

garden as they unfurled in the summer's sun, and like a woman, too, he loved the cleanness of his abode.

His mother's growing apathy had long ago put on him and an old mammy the burden of the home. But it did not make him womanish. When astride his well-bred horse in that country of large men and fine horses, there was no finer apparition than the doctor out on duty or for exercise. The regret was common in his county that so fine a potential factor should hold himself aloof from everything social in the stricter sense. Of course, theboys whooped it up when he had time to umpire their games. At the county fair he was sure to be one of the judges, and while he wanted it, no one else had a show for the school commissionership.

From church and social gatherings, which in smaller communities so largely overlap, he instinctively kept away. His conscience told him that celibacy must be his portion. One must know the well-bred women of that eastern edge of the blue grass country to know what a struggle the resolve cost. But he believed in the visitations of the sins on the third and fourth generations; not because it is so laid down in the Pentateuch, but because he had witnessed them often enough in his work. The transmission of vicious nerve types from generation to generation was all but a fixed idea with him, and a morbid habit but one of its manifestations.

Surely he could never forget the tragic manner of his mother's passing. The consolation of the usual end of the opium habitue from some intercurrent disease was not vouchsafed him. When the final "I am the resurrection and the life" had been read, no one but the son knew how death had made placid and even gentle the features of one who had passed the bar in a raving access of delirium.

II.

Every person in Paris knows the Pont Neuf; knows it for a misnomer, for it is the oldest bridge of all; knows it for the bronze of Henry of Navarre cast into the canon and recast in the mold of the kingly father of the pointed beard. Just east of it is the Pont St. Michel; it is only a little less old than the

Pont Neuf; a little less wide, but devoid of every statuesque adornment. The tourist passes it by. Baedeker does not star it. Yet it affords the best possible view of the side elevation of Notre Dame; from no other viewpoint can one obtain a like impression of the massive stateliness of the cathedral and of its squared towers; of the large rose window of the apse; nor above all of the color contrast of the pile of dark gray stone, the little patch of verdure which surrounds it on this side, and the blue-green of the river restlessly laving the quay. If you are in Paris to study, no matter what, you know the Pont St. Michel. Here begins the boulevard of the same name, the main artery of the Latin quarter. Every human corpuscle in that domain must, as it were, be pumped through it once or twice in every twenty-four hours and, to continue the metaphor, the pumping process begins at the Pont St. Michel. Wait long enough at the bridge and you will meet everyone who comes to study, be it art or science; medicine or law; architecture or theology; sanscrit or volapuk; it is all the same. The words of William Tell lying in wait for the tyrant, Kessler, apply here. "Through this narrow lane must he come." At any rate, here I first met him; that is, the doctor.

To say the least it was unusual. I met him with my collar grasped in his hand as in a steel vise and the command hissed in my ears, "Stop, don't do that." The French was good enough, but the accent atrocious. "Let go," I yelled in my mother-tongue. "What in hell do you mean?" Slowly he released his grip and regarding me with a querulous smile said, "I beg your pardon. I reckon I've made an ass of myself. You see I watched you for a long time leaning over the parapet of the bridge, abstractedly staring at the sky, the church yonder and the water; mostly the water. Then I thought I saw you lift yourself to the rail. You see the morgue over there? Well, I thought you were thither bound by the route the tired-of-life Parisian usually selects, the river." "Well, my would-be-life-preserver," I laughingly rejoined, "You are new to Paris and not much of a mind reader at that. The Seine as a volitional translator to the Great Beyond is entirely out of vogue. Charcoal and plain illuminating gas have the call with the prole-

tariat. Now, if I wanted to end it all, I would begin at the top of the Eiffel Tower. I would make it spectacular. But nothing was further from my mind. I live by the brush; and when you so ruthlessly laid hands on me, I was striving for a wider view of the Isle St. Louis, and the shipping on either side just beyond the church. Turner was not so much; his canvasses won't last. Yet see what he made of the shipping of Scotland. What Corot did for the Forest of Fontaineblau, and Ziem for the canals of Venice. Well, that's my aim for the grand Seine and the quays of Paris; and you spoiled my day." Megalocephaly is not ordinarily one of my failings, but the grip on my neck had impeded the downward flow of blood." "Well," he said, extending a big well formed hand, "I can't be more than sorry for my mistake; and that I am. Perhaps I made it because I am blue and lonely. I haven't spoken a word of English for nearly a week. Come, you seem to know this place. It's near luncheon time. Let's sit down somewhere and talk things over." Then we exchanged cards.

III.

On the first corner of the boulevard to the left, opposite the great bronze bas-relief of St. Michel is the Brasserie D'Harcourt. It is one, but the best, of an hundred cafe restaurants of the Quarter where the cravings of the inner man may be daintily allayed and at a moderate outlay. The waiter, grown gray in the service, knows me well. "What will monsieur have?" is his routine question after I am seated and have been handed a napkin; and in a routine way I answer. "Pierre, bring me something nice; I leave it entirely to you." In a little while over the crisp French bread that comes in yard lengths, a turbot brought in that morning, an omelet that would have gone sky-high but for the mushrooms in it, Creme d'Ysigny, sweet as nectar, for desert and with it all a bottle of Chambertin, not too old and cradled in straw. I determined to launch this neophyte in the right way. I felt that my ten years in Paris privileged me, not my success which was moderate, I might say very moderate. My river pictures had not as yet been catalogued for the Salon

and only two signed Thomas Baxter, pinxit, had been hung pretty far above the line in the Salon de Refuses.

"Who on earth gave you that steer?" I exclaimed in our venacular when he told me of his hotel. "Hotel de L'Univers et du Portugal Reunis. I never heard of it." "Why," he laughingly replied, "you don't seem to know all of Paris after all. A Scotch doctor coming over on the Umbria put me on and I am not a bit sorry. Of course, it isn't a caravansary like the Continental or the Grand, nor a Maison Doree like the Ritz and the Prince doesn't register there; but just the same I am not sorry. The Hotel of the Universe and of Portugal Reunited ought to be a pretty big establishment, but it isn't as wide as the name would be in letters a foot wide. It has a very pretty little court behind a two hundred years old wrought iron gate; the proprietor is an old Alsatian woman who saves the year round to put a wreath on the statue of Strassburg in the Place de la Concord once a year. Her moustached daughter does all the work; after nine o'clock the gate is locked and I must ring for admission; but my room, pretty high up, makes up for it all. Way in the distance I can see the sun shine on the white dome-capped church of Montmartre, and just across the street is the bell tower of St. Germaine. Why at night I can almost hear it ring as it did three hundred years ago the signal for the massacre, that changed the destiny of France, and made of Protestantism a lasting thing."

"That is a bully speech," I said, "quite a monologue, in fact. It's settled, doctor or no doctor. You've got the right ring. You belong to us and the Latin quarter." And he was not unwilling.

Within forty-eight hours he was pleasantly quartered in the Rue de la Sorbonne opposite the Gardens of the Luxembourg. He met the few English speaking medics who followed the great Barnard at the College de France, Pasteur at the Institute or the great surgeons at the Hotel Dieu and the Pitie. They were already becoming fewer every year. The loadstone of modern science on the other side of the Rhine was already drawing them on.

IV.

Paris differs from every other university city in the world, at least in the study of medicine. One's work is not all under one roof as it practically is in Berlin, in Vienna and in Edinburgh. Hence, it is impossible to be hammering the iron all the time, and that is so much to the good. Furthermore, it is preventive of onesided and top-heavy development; and that is even better. In the "between the acts" of life there are beauty and art, music and ideals to breathe in with the very air of Paris, and my doctor has a pair of lungs like a smithy bellows. His nostalgia was quickly knocked to smithereens. It was a treat to see him expand in his new surroundings. For example, within a month of his advent among us he showed us his first art purchase. It was a large Braun photogravure of the famous Lefebre "Truth." "Doctor, if you show that at home," I ventured, "the Parkhursts of Lewis County will ride you on a rail." "That form of raillery never got south of the Ohio," he replied with a lusty poke in my ribs. "But seriously," he continued, "I am going to use this at home as an argument for the nude in art." With the eye of one who knows his anatomy, he long regarded that woman's form divine, boldly facing the world and holding on high the flaming torch. "Of course," he mused, "the left hip is a trifle high; just a suspicion of an old joint trouble. But is there any other possible presentment of ideal truth?" "Why surely," I said, "we could put a skirt, a short calico sac and a sunbonnet on her; couldn't we?" "Of course, we could," came the answer. "And then we could follow her to the back yard and see her put the torch to the wood under the lard kettle. Randolph," I said, "you are up in the air, and so am I; three flights. Cover up your Truth and let's get to earth and cool off outside and inside."

But he had grown irrepressible. The cool breezes from the gardens and the pale Bavarian at the Cafe Soufflot started him afresh. "Baxter," he said, "I hope you won't mind; I have thought your case over seriously. I think you are on the wrong track in your work. Your river pictures of Paris and of the monumental buildings on its banks will never bring you fame."

I confess I was almost bowled over. "Damn you, old man," I cried, "if you hadn't tried to save my life, I should resent that as an impertinence. Why, you are a very tyro in such matters. Don't you know that they are the very best pot-boilers and that I need the sheckels? The man with the price wants to take Notre Dame, the Louvre or the Invalides home with him; a costly souvenir to show his friends." "Don't take it amiss," he said, "but that is meritricious. I haven't seen anything of that kind in the Salon Carre of the Louvre or even in the Luxembourg. The old masters, I believe, never touched the inanimate. Nor do artists of today who give promise of ranking so a hundred years hence. Millet, Gerard, Israels and even Bougereau idealize episodes of living souls; and they of the Barbizon School, Corot, Rousseau and D'Aubigny, so plentiful hereabouts, do the same for living, pulsing nature. Life and action alone can hold the gaze of man, and he who best can fix its tensest moments on his canvas will be in every month. Sometime or other, if you will permit me, I shall give you a theme well worth your while. Every hospital ward is full of them." I couldn't be angry. I came away sadly. As I walked home alone I reflected that for five years I had not seen my master at work, and for fully three a model had not crossed the threshold of my studio. A bare fact stared me in the face; I had become an ordinary hack.

V.

The mortal illness of a relation called me to the Riviera where I remained for two months. On my return I called on the doctor. He appeared to be changed; less bouyant. He was engulfed in work. He told me he was helping in the experimental studies of Vulpian and Brown-Sequard at the Ecole de Medicine. He was sectioning spinal cords and brains under Ranvier at the College of France. But with one man he seemed positively enthralled. He called him the great, the only Charcot of la Salpetriere. I confessed never having heard of the Salpetriere and only faintly of his great Charcot. "Is he one of the Immortals of the Academy that he is so great?" I ventured at

last to ask. "Nonsense," he retorted, "there are forty of them, but there is only one Charcot. They write history and blank verse and make dictionaries, two or three folios to the letter. Charcot does things. As long as mankind needs doctors, my Charcot will outlive the most immortal of the immortal scriveners. He has shown us a new picture of gall stone disease; how to recognize a softened spinal marrow from a wobbly joint; and more than all else how, by suggestion, a vigorous mind may influence for good sickness in others. My Charcot evolved all that we know of the suggestive treatment of disease, for he made of hypnotism a science." "And the Salpetriere," I interrupted, "is that the cabinet wherein he hypnotized you? The name reminds me of the pickling vats at Armours." "Baxter," he said, "you're not far off in your etymology. Richelieu did make salt-peter there for his powder. La Salpetriere was the largest arsenal in the world two hundred years ago; and for one hundred years it has been the largest hospital, and all for women." He hesitated for a while and seemed to forget my presence. Then, as if thinking aloud, he went on. "All for women, women, women; nothing but women there. Over three thousand, hysterical, paralyzed, slaves to opium, degenerate and insane. Nothing but women. In the large waiting room is a painting of Pinel striking the shackles from the insane. My God," he suddenly cried out, "who will strike the fetters from the thousands of men and women whom these wretches brought into life before they themselves were stricken?"

With that he threw himself upon the couch and wept as weeps only the strong man. I rushed to his side and found his hand and held it. When words came to me at last, I said, "Doctor Marshall, what has happened to you in my absence; this is not an impersonal grief. Come, let me help you if I can. A sorrow shared is half a sorrow. Won't you trust me?" He shook his head. "Thank you Baxter, you're awfully good." he blurted out. "But not now, not now. I may ask you to do me a kindness right soon. Won't you leave me now? I am better already, and will be myself again in the morning."

There was only one thing to do, and I did it. My senses must have been sharpened by the scene just enacted. As I

walked homeward in the clear full moonlight of the early fall, I heard the rustling of the leaves stiffened by the first frost and I heard the joyous dulcet tones of many men and women always paired and in close affinity as they passed me somewhere bound. There was nothing personal in the thought that came to me of the fettered men and women yet to come.

VI.

The One Document of the Case

One week before the occurrence just described, there was admitted to the Salle Flavert of the Salpetriere a woman brought from an attic in the Quarter of the Temple. The record of admission was as follows: Series H. No. 4273. The following facts were obtained by the ambulance surgeon from neighbors in the tenement where the patient was found and where she had lived for a year. Name unknown; previous residence and occupation unknown; friends unknown. Up to the time of her admission to the hospital, she had gained a livelihood by cleaning the kiosks of the boulevard and gathering and disposing of the waste and unsold papers. During three or four months her sight was fast becoming impaired and there had developed a palsy of the right arm, which did not keep her from her work. On several occasions she had been found in a fit and unconscious. The present attack lasting longer than ordinary, she was removed to the hospital.

Presumptive diagnosis: Apoplexy.

Note—About her neck was found a rather worn locket. Within, on one side of the case, there was set a photograph of a girl two or three years old; on the other, a paper yellow and crisp with age with the words almost effaced by time, "Miriam Preston Ford, Convent of the Ursulines, Surennes."

VII.

When Dr. Randolph entered the hospital one morning, he found that the case of which the above is the record of admission had been assigned to him for study and diagnosis. As he approached the bed whereon the patient lay, a picture con-

fronted him, that to say the least was unusual in hospitals before the trained nurse came in. The good sisters in their sombre woolen tunics and white caps with large wide flanges were then as now, from the emotional viewpoint, a negligible quantity. What he saw were the antitheses of womanhood. On the cot a woman apparently between forty and fifty whose race on earth seemed nearly run. The wan face and furrowed brow were framed in by a wealth of hair which had once been auburn, but was fast getting gray. One wavy strand alone seemed to have defied the color change of time. It sprang from over the middle of the forehead and was lost in a tangle of red and gray on the temple. It was of the color of reddish gold. The features, regular enough in form to have once been beautiful, were drawn; the angle of the mouth drooped on the right side and flapped with the noisy breathing; it drooled as does a baby's. The lips twitched as in a vain effort at speech, but no articulate word came forth. On the cheek was an old scar, round and large as a centime, of dead white and bordered in brown. The eyes, with pupils large and uneven, stared into space and seemed not to see. The fingers of the right hand were fixed like the claw of some monster bird, and the forearm rigidly held at an angle above the counterpane. The thin arm was bent at the elbow. With the left hand the patient clung to the hand of her antithesis.

She could not have been much over twenty. Even as she leaned over the prostrate form, it was plain that she was beyond the common height and possessed a shape in perfect symmetry. Grace must be there in every movement of a form so good and vigorous health of body and a mind full of happy content. Her hair was auburn and the color of her cheeks heightened to a rich red by some unwonted emotion. She was laboring under a tremendous strain. Her bosom heaved fast and the parted lips and chiselled nostrils quivered with every breath as though she had come a long way and in haste. From the perfect oval of the face, her soft brown eyes, lustrous in their intensity, peered in querulous wonder on the blanching face of the wretched woman as thought they must see answered there the questions ringing her very soul with anguish. "Who are you? Why have I been

sent for? My God, who am I and what are we one to the other?"

So profound was her revery that a little while passed before the girl was conscious of Randolph's presence. Then rising to her full height, she said, "Monsieur, you are the doctor. One waits on your kind as on a prophet. Can you tell me, will she live? Does she know me? Will she ever speak again? My eternal peace of mind depends on it." Her voice, despite the tenseness of the moment, struck Randolph's ear like a low sweet song. "Mademoiselle," he said after a cursory examination, "you may rest assured that there is no immediate danger. To answer the other questions requires careful study and time. Likely you may be of help, for by your emotion I judge that you are very near of kin, and can throw much light on the history of the case." As the girl was about to speak he checked her. "Not here mademoiselle. It is against the rules of the ward, where silence is enjoined on everyone. Out in the court we will be undistrubed. I will bring my note-book with me. Come."

VIII.

During the week that followed, the gossips of the Salpetriere, and there are gossips in every hospital, had an unusual morsel. Not that there was any effort made at concealment. From every window of the court you could see them day after day, he the handsome foreigner, the promising favorite of Charcot; she, despite the beauty of her youth and innocence, the daughter of an unknown derelict of the Quarter of the Temple. From the ward they would stroll into the garden and for an hour or more sit under the great oak within sound of the tinkling fountain. Then he would take her to the convent carriage at the great front gate where a sister always awaited her coming. He knew that he had brought her there at first in subterfuge and later because he could not help it. She could tell him nothing except of herself, and for that he needed no note-book. Her story simply told and in sweet cadence seared his very brain with pain; and the doubts it engendered made him suffer more than a human ought to bear. Miriam never knew her father

or mother. She told him that her earliest recollection she thought was of dreamland, for it was of spacious rooms ablaze with the lights of many candles and merry with music and dancing and laughter. Handsome men would come and go. They brought her trinkets. The women looked so beautiful and dressed like fairies or princesses, at least. One more beautiful than all the rest would sing her to sleep and kiss her and call her "dearest." And sometimes she would cry and the tears falling on her little face would burn and then make her cry too. One night they must have fallen faster and hotter then ever before, for as she fell asleep she could feel the wet on her little pillow. It must have been a dream, for when she awoke the beautiful room and the princess were gone. About her were women in black gowns with caps which covered the head, so that you could not see the hair. They were so good to her when she cried for the princess, who never came again except in dreams. They called her Miriam; and when she was a little older told her that her name was Miriam Preston Ford. Then she learned that she was in a convent of the Good Sisters. And as she grew to larger girlhood learned that someone had left with them a little fund that she might always be above want. It had never been added to. Every year on here fete day there would come from somewhere a little token of love. On her last, now a month gone, it did not come.

After she had finished there came a long pause, each buried in thought. Suddenly Miriam's face was suffused and the blush mounted to her brows. For the first time since they had met she turned her face from him that he might not see her tears. Randolph felt that then to that soul so pure, there had come a dread awakening. He could find no words for the pity he felt. But there are other methods of expression. He chose the strongest and cared not how many pairs of curious eyes in the windows on the court might see a woman sobbing, her head pillowed on his breast.

IX.

St. James has it that "Blessed is the man that endureth temptation." Dr. Randolph believed it wiser to go out of its

way and felt strong enough to do it. He had studied the patient as he had never studied another. Whole hours he passed at the bedside. Every muscle had been tested for its strength and every nerve for its conductivity. He had charted the body for the sense of feeling. For minutes at a time he peered into the depths of the eye to note the blood stagnant in the thin-walled veins. He had even seen her grind her head into the pillow from pain; and twice had seen her in a spasm. Each time it began in the fingers of the claw-like hand, the arm became tensely drawn and then the face; and then the very bed shook with the violence of the general convulsion. From Randolph's mind all doubt had gone. A brain tumor alone could produce this train of symptoms and the scar on the face told him that it was the price of sin. How little in contrast the cross of his own heritage now seemed. He had quite forgotten it. His duty was clearly before him. He must give up Miriam. She was young and with the consolation of her church must learn to forget. As for himself, he would seek forgetfulness in work. Then he thought of me and the kindness he had asked of me. He would tell me all. Then my art must give him something to take away, lest he forget too fast.

To a man in Randolph's frame of mind, one trifle will bring despair and another the elation of hope. On the day that I came, his emotions ran the entire gamut. Fortunately Miriam was not at the bedside—for the instant I saw the patient with the strand of reddish gold among the gray, I could not help exclaiming with a voice of confliction, "LaRaie Doree." Then taking Randolph aside I imparted to him the little I knew of the woman with the ray of golden hair. She had come from no one knew where. For a while she was a much sought after model. Ten years ago she was the queen of her world with a large establishment near the Bois. After a year or two, like all queens of her kind, she disappeared; no one knew where and no one cared. Then Randolph, white with anxiety, whispered a question to which I replied, "No, no; I don't know, but I think not. Those things are—." My sentence was cut short by the entrance into the ward of a striking figure. Sisters, internes, orderlies and such of the patients as were able rose with his

coming in and stood at respectful attention. Charcot was worthy of it all. A little above the common height, his figure was full and of unusual dignity. He wore a long black frock buttoned to the throat, and all the white that one could see was at the neck and at the wrists. So far as his dress went, one might have taken him for a parish priest. But not his head which was large, nor his face which was clean shaven. Its color, a little swarthy, showed his meridional descent; and the lines, which time had drawn, compassion joined to courage. From his high broad forehead the iron gray hair was brushed straight back and was long as one sees it in the portraits of Liszt. And the large soft eyes, long trained to see and to know, at once saw a man in great distress. Charcot paused but for a moment, than came straight to Randolph's side. "My dear pupil," he said, "you are in trouble. How can I help you?" "Yes, my master," he answered, falling in the custom of the French, "I am deeply concerned in this unconscious woman, and even more in the mystery in which her case is shrouded." Herewith he handed him without comment the records of the case and the notes he had made. For a long time Charcot studied them and the patient in silence. Then he said, "Are you sure she is unconscious?" "She does not understand words that she may hear, nor can she give utterance to ideas she may have. She is aphasic." "Have you tried music? Once before I have known it to be the only medium of expression left to a patient." Then he turned to Sister Patricia at the bedside. "Sister," he said, "I have often heard your voice above all the rest in the chapel. Won't you think of something to sing? Some melody that every French child would be likely to know." The sister hesitated but for an instant, then lowered her head to the level of the patient, and in a low, sweet voice chanted an Ave Maria. As the fluent harmony fell upon her ear, the woman's head began to move with the measured rhythm of Gounod's heavenly song. "Voila," said the master when it was ended, "connection has been made. You are right my friend; there is a brain tumor. It is a case for the surgeon. We must let Fleuret know."

At the hospital they spoke for many months of that wonderful operation, and of the great men of the faculty who came to see it; of the deftness with which the great Fleuret had cut away the bone over the ear and bared the thin covering of the brain over a space as large as the palm of the hand. Then, they say, he hesitated, but Charcot urged him on. "See," he whispered, "how dark it looks and how tense. The dura does not pulsate, so great is the pressure within. It must be there right under your finger." And then as the membrane was cut as Charcot had directed, there, in a bed of heathy brain lay the tumor as large as a peach and as round; and as easily lifted out as if it had been on a tray. Then an unusual thing happened, for the galaxy of great men broke into applause. Another glory had been added to the medicine of France. It was so loud that only a few of those present and were near, heard a large man fall fainting to the floor in a far corner of the room. It was Doctor Randolph. Could it have been the sight of blood?

X.

As I look back after twenty years on these events which proved to be a turning-point in my career and cemented a friendship which must continue while life lasts, I must confess that the triumph of the surgeon was only relative; I might add scientific. Indeed, I have often heard it said that many a brilliant operation is little more than a victory of science and skill on the one hand, and on the other an illustration of what man may endure and live. Be that it may in the abstract, it surely was true in the concrete case of the poor woman with the brain tumor. The facts which I saw or were given to me at the time by Randolph are as clearly before me as though they were of yesterday. Slowly, very slowly, the power of speech returned. At first in disconnected words and phrases and then in chopped-off sentences. One could almost see the intact mind at work in search of words to fit its thoughts and find them. There were eager ears to catch them feeble as they were, and piece them together, for they had a story to tell. Of a man who had worn the gray even to Appomatox and lost all; all but the

love of a true woman who believed in him and his art. They told of their struggle together in Paris and the first gleam of success. Then they told of the coming of a little baby girl and of the strange nurse from an orphanage in the Province. She was hardly more than a child herself in years. She was so happy there, for she had never tasted kindness before. And she requited them in love, love for all of them, but most for little Miriam. Then came the war of '70 and the father followed the army as artist for a foreign weekly. The last mail into Paris before the siege brought tidings of his death by a bullet intended for some Frenchman. Then she shuddered as she spoke of the hardships of the siege and the greater terrors of the Commune. At its very height Miriam's mother passed away.

After a long pause, the poor woman burst into a passion little in keeping with the seeming nearness of her end. "I did wrong to keep her," she cried, "but she was all I had. There was a letter. I never mailed it, lest they would come and take her away from me. You must find it still in my little attic room. I slaved for her at thirty sous the day and was happy. Then someone," she continued, "I scarce remember who saw the color of my hair and the ray of gold. It was the beginning. The ascent of the ladder to the world where I lived is so easy, but the heart grows cold. Mine became as ice, but for one little chamber where my love for Miriam lay enshrined. It told me that when I called she would come to close my eyes. Long ago one Magdalen was saved by repentance and love of the Master, may I not win salvation through the love I gave a child not my own?"

XI.

In the Salon of 1890, there hung a painting which all critics acclaimed the success of the year. The guards had to rope it about to keep away the crowd. It was called "Articulo Mortis." The central figure is of a woman in the throes of death. Her head is swathed in bandages, from which only one strand of reddish gold hair has escaped. The hands folded on the counterpane clasp a camelia twined about with a rosary. On the little table at the head is a crucifix set between two lighted

candles. On opposite sides near the foot of the bed are the profile figures of a man and woman kneeling. Their faces are buried in the coverlet, their hands clasped across the narrow bed and their hair touching. There is one other figure in the painting. It is of a little old priest in the garb of his office, the blue stole with narrow white border. His kindly face is close to the ear of the penitent. He just has whispered the last words of the sacrament, for her face is glorified in the peace and grace of another world. "Benedicat Te Omnipotens Pater Deus, Filius et Spiritus Sanctus. Amen." Of course, I am not in the picture, except in the lower corner where is scrawled in black paint, Thomas Baxter, pinxit. I had at last been catalogued for the Salon.

A VILLAGE IDOL

A VILLAGE IDOL

I LEARNED to know him about the mid seventies. A student friendship, cemented in the hospitals, brought me to the little Westphalian town where he had lived and worked for nearly two generations. It was on the day of Atonement and he was on his way to the modest little synagogue the first time I saw him. The tall, slightly bent figure was clothed in genteel broadcloth, the coat tightly buttoned and on its wide lapel was the Order of the Iron Cross. The face was clean shaven and showed about the chin and mouth and eyes the lines and furrows that come to us all if life holds out. Over the square chin the lower lip projected out covering its upper mate, as one often sees it in persons of strong mind and given to thinking much and deep and hard. His forehead was shaded by the broad rim of his silk hat which was of a fashion I did not know, but it was not modern. As he walked rather briskly along feeling the well-known way with his heavy stick, the first glance told you that he was blind. Such was my first impression of the octogenarian, village doctor of P. who with his iron cross had gained the title of Privy Counselor to the King.

Because I spoke English I gained ready access to his modest home, for he revered his Shakespeare as perhaps only German scholars can. I was a willing foil for the soliloquy and Anthony's oration which he recited with verbal accuracy but execrable pronunciation. Over the low bookcase were little busts of his favorite Shakespeare and Goethe. Between them, hanging against the wall was a framed, faded parchment signed by the Rector Magnificus of the University of Goettingen, dated 1817, setting forth that Sigismund R. was qualified to practice medicine, chirurgie and the art of midwifery. Through thirty years with rare and short breaks, the physical and mental ills of human kind passed review before him, and he ministered to them all with pity and judgment, with patience and zeal. Above all he prided himself on being able help-meet to the

stork. His success in this work had spread his fame far beyond his little province, and time out of number was he summoned to save two lives where one had breathed before.

Mild and gentle this vicar of heaven had labored on earth, yet his spirit was sorely troubled by the wrongs done his people and his country. He and his had never lived in a ghetto. To the core he was a German. He had seen his beloved Westphalia made a plaything of the great emperor; a kingdom for less than a decade. Seven of his colleagues of Goettingen were driven from the University because of their demands for a constitution. During ten years his cravings for freedom gnawed at his heart. When the spirit of '48 swept the land from the North Sea to the Swiss Lakes and from the Atlantic to the Danube, the little town could hold the staid doctor no longer. On to Frankfort to watch anear the progress of the Diet. For more than a month he neglected his charges to uplift the hands of his compatriots in their struggles for liberty of thought, of speech, of press and of creed, and above all, for an unified Fatherland. Only when it had been decided to submit a constitution, and to proffer the imperial German crown to Frederick William of Prussia, did this village idealist return home. Blessed was he as a messenger bringing glad tidings of freedom and peace. In the fullness of his joy he crowned with laurel the effigy of the king on his study mantel.

History has recorded how the work of the Diet was undone. Weaker than his convictions, the king declined the crown nor would he consent that a constitution come between him and his people. With a rude shock all Germany felt itself again enchained. As for the subject of this sketch, he was for the only time in his life beside himself with rage. When proofs of the royal weakness supplanted vague rumor, frenzy seemed to seize him for in no other way were his words or actions to be explained or pardoned. It was on Sunday, about noon, when the little church was emptying itself that the doctor appeared in the doorway, behind him his faithful coachman bearing in his arms the bust of the king crowned with laurel. Ramblingly he harrangued the little crowd that gathered and listened in open-mouthed wonder. The climax of his speech came quickly.

"Rule may this weakly king over a downtrodden people," he shouted, "but not in the house of one who would be free." Calmly he took the plaster model from the trembling hands of his follower and with all the force at his command, shattered it on the flagging of the street. As an oncoming storm will dissipate a crowd, this frivolous deed emptied the little square in a trice. No one cared or dared to be known as a participant of this "lese majestatis." And as for the doctor, friends implored him to flee, to join the large stream that brought the best German blood to American shores. All in vain. He would abide the consequences which—never came. Whether the majesty of the law was blind or wise, the only dramatic episode in the history of this little village, that could have brought it national fame, was passed unnoticed and unsung. ts central figure resumed with love and zest the labor for which he was best fitted. Without surcease he worked until his seventieth year; he then became blind of a cataract. An unsuccessful operation left him in total darkness; left him to ponder over the thousand and one incidents of an eventful though seemingly monotonous life. The memories must have been pleasant for the most part, for a smile almost always lingered about the sightless orbs and full mouth. It pleased him that often in his infirmity he was consulted by his youthful successor in difficult cases. He felt conscious of an unimpaired sense of hearing and of touch, and of his ability to reason from effect to cause, from symptoms to disease itself. Thus he would often guide the blow that he could not see to deliver.

So he was when I came to know him. I spent many hours of my long vacation with him in long walks or at chess, or at reading and conversing in English. Thus it chanced that I witnessed the culminating incident of his professional life. We were at chess. He had just taken my queen when the summons came. The stork had for many hours hovered over a peasant home nearly four miles away. Neither the midwife nor the doctor could persuade the stork to leave his burden and be gone. Would he come? If sightless eyes ever light up, his were aflame. A flush as of youth suffused his face. He tested his muscles as if to see whether their strength was all there. For the moment

he seemed to forget both his affliction and what he had learned since its coming. His sense of localization was shattered. In the flurry of the moment he brushed against tables and chairs and door jamb in the hurried search for his case of instruments long disused. How fondly he handled them, each one, noting the curve of the blade, its temper and weight. We drove in the doctor's one-horse cab that like its owner had seen years of service and like him had lost its luster, but was staunch at the core. As we slowly bowled over the smooth roads it pleased the old man at my side to be told of the respectful greetings of the passersby. There was no difficulty in finding the home of the suffering woman. As we neared the edge of the peasant village, we noticed a small hushed crowd about a little stone cottage. From the gateway there was coming out that ominous little procession so often seen in ultra catholic countries, a priest in cassock flanked on each side by an acolyte bearing the incense burner and crucifix. The last sacrament had been administered. Against the front of the house leaned the figure of a strong man, face to the wall, arms uplifted and crossed above the head. The back only was visible, but how it pictured despair as it heaved and fell with the sobbing.

The room of the suffering was hushed; exhausted nature was helpless. The holy church could bring peace of mind, but no surcease of pain. The curse of Eve, "In sorrow shalt thou bring forth children," was stamped on every lineament of this most stricken of her daughters. Here was the added curse; a mistake of nature. A babe born to full fruition and all but doomed at life's threshold. Such mistakes had often come before this grand old man and been made right. How calm and confident he looked now that he had been placed at the bedside. The well trained touch had not lost its cunning nor the well-poised muscles their strength. On the sightless face I could read the progress of the case. The knotted muscles of the forehead pictured the hard thinking behind them. A beam stealing from the eyes to nostrils and mouth told the solution had been found. The piercing cries of the patient swerved him not from his purpose, as with Herculean strength he brought the fine muscles of his arms into play. The suspense was great, but

short. One prolonged shriek of anguish—followed as if in swift refrain by a smothered little wail from a newcomer on the stage of life.

Twenty-eight years later I again came to the obscure Westphalian village. It chanced to be All-Souls Day. I fell in with the little stream of men and women perennially wending its way to the rural God's Acre. Arrived there, I came on one who like myself looked the stranger. He appeared about thirty and, from his bearing, of studious habits. Although evidently he had come some distance, he knew well the paths of the little cemetery. He walked straight to a grave that was far from new, and deposited thereon a wreath of wax flowers. Then I followed him to the little corner set aside for Jewish graves. Arrived at one he seemed to know well, he picked a pebble from the roadside and laid it reverently with the hundreds already on the slab. I followed his example. For the orthodox Jew will have his grave cared for as Abraham did for Sarah in the Cave of Machpeleh, he covered it with stones. I looked at the simple inscription. It read, "Sigismund R., Doctor of Medicine. Born 1790—Died 1883. And in Hebrew characters, "May his soul be bound up in a bundle of life." Nothing more.

JOHN HUNTER

JOHN HUNTER

IT is restful, in the hurly-burly of our professional lives, occasionally to look back over a century or two and learn something of the origin of things that are now taken for granted. The committee of the Alumni Association doubtless had this in view, when they did me the honor, a few weeks ago, to ask for a short address upon some subject of my choosing.

For the last half century medical men the world over have been inclined to worship at the trans-Rhenish shrines of medicine. If we would look, however, for the altars where first burned the flames of clinical and scientific medicine and surgery, we can find them in abundance north of the chalk cliffs of Dover, and even north of the Tweed.

Knowledge is always based upon accuracy of observation, and science is evolved only by inductive reasoning on facts observed. Think for a moment of the names that Great Britain has stamped upon parts of our anatomies, upon disease and upon injury. There are Harvey, Winslow and Glisson, Lower, Willis, Colles and Pott, Graves, Bright and Addison, and last, but foremost of all, is the name of John Hunter.

If I have selected him from among the host of Great Britains' long list of contributors to our science and art, it is first and foremost, of course, because he stands out pre-eminently among surgeons from the very beginning as the father of comparative anatomy and physiology, of surgical pathology, and, second, because I like to think of his portrait by Sir Joshua Reynolds. He is surrounded by some of the objects of his study, with manuscripts upon the table. The clothes are seemingly coarse, the head resting upon a short, thick neck, the jaw under-hung, the hair thinned and white only at the temples, the face upturned, the chin resting upon the hand, the eyes piercing the unknown, the whole expressive of the thinker of thoughts that were never thought before. "That man thinks for himself," said Lavater, on looking at the portrait. "He is as one who is looking far beyond and away from things visible, into a world of truth and

law, which can only be intellectually discerned" (Paget). This portrait hangs in the sanctum sanctorum of the Royal College of Surgeons. Beneath it the degrees of the college are conferred and it must be that every recipient, at least for the time being, feels himself guided aright by the piercing eye of the intellectual giant I have attempted to portray. Every two years this portrait hangs over the head of some great English surgeon when he delivers the biennial Hunterian oration, instituted twenty-five years after Hunter's death in 1793. This tribute to Hunter is unique, as it must be, for from the work of no other man in medicine or surgery could some discovery be chosen about which to weave an address worthy of the foremost body of the surgeon's craft.

If the eugenists should claim that the procreation of many children reduces them mentally or physically in the order of their birth, the case of John Hunter could be used to annul it. He was the Benjamin of his family, nine having come before him.

Curiously enough, next to John Hunter, perhaps the most-prominent man of his time, in London, was his brother William, many years his senior. As the oldest of the family, William had received a college training, at Glasgow. John Hunter received none. He spent three years of his life assisting an uncle, at cabinet making, in Scotland. To what extent this enabled him to use his hands in the proper surgical way may be questioned. His case has often been cited to show that it would be desirable for all who would become surgeons to have some technical manual training. It is a poor example. On the authority of his most illustrious surgical pupil, Sir Astley Cooper, Hunter possessed little or no dexterity and not the least operative elegance. His anatomical knowledge helped him out.

For a short time Hunter, at the solicitation of his brother, attended Oxford, with a view of training in the classics. Perhaps, happily, this was a failure. "They wanted," he said, "to make an old woman of me, or that I should stuff Latin and Greek at the university, but these schemes I cracked like so many vermin, as they came before me." This defect in

Hunter's training, and the probability that he had never visited the continent, except while with the army in Spain, accounted for his lack of acquaintance with what was being done elsewhere. He read very little, and therefore his reflections were untrammeled by the views of others. In other fields of human endeavor like ignorance has not infrequently led to research along entirely new lines. In the case of Hunter, it occasionally caused some question as to the priority of discoveries made, as, for example, that of the presence of air within the bones of certain birds.

When Hunter came to London as a green lad there was no regular medical school in that metropolis of then about one-half million of people. Surgery as represented even by Percival Pott and Cheselden had no very great standing. In a remarkable little volume, "The Gold Headed Cane," published in 1827, in which are described the doings of five great men who, from 1689 to 1825, successively carried this cane, I find mention of only one surgeon of note, namely, Cheselden, great in surgery as he was in obstetrics; and it was from Cheselden that Hunter learned the rudiments of surgery.

In his twentieth year Hunter began his anatomical studies under his brother, his first dissection being of an arm. Within a year he became so proficient that he was entrusted with class work. It was the custom of the time for distinguished men to have classes in dissection and to combine therewith clinical work at some hospital. In regard to the former, John Hunter not only helped in the dissections, but he was required to cater to the dissecting room. He was a great favorite, therefore, with the resurrectionists. His manner at this time was quite uncouth, notwithstanding the fact that he had the opportunity of cultivating social graces and amenities at his brother's table, about which were gathered men eminent in every walk of life; and let us bear in mind that the London of this period was the London of Mrs. Siddons and of Garrick, of Dr. Johnson, of Warren Hastings, of Pitt and Chesterfield. If Hunter was an untutored genius he in other ways turned to good account the advantages of environment and association. He never acquired the culture or refinement of his brother William, who, in his

portraits looks the fine fastidious gentleman, wearing lace cuffs, worthy to grace the arms of a duchess. William, in speaking, for example of a gun-shot wound in the intestine, would hardly as did John, describe the ball as "having gone into the man's belly and hit his guts such a damn thump that they mortified." Says Solomon of the wise man, "For the grace of his lips the King shall be his friend"; and it was true of William Hunter, for he was the friend of George the Third, and I might add by way of recalling an obsolete term, man midwife to the Queen. Because John was greater, we should not forget that without William there could have been no John.

In the first years of practice in Hunterian days 110 pounds a year was considered sufficient to live upon; 10 pounds for clothes, the rest for sustenance and study. Visits were to be made on "clean shirt days" only. But as practice improved the fees were very large. When William Hunter died he left a museum to Old College, Glasgow, worth one-half million dollars.

In Hunter's time the field of gross anatomy had been pretty thoroughly explored. The injection of the vessels by Swammerdam and particularly by Ruysch gave great impetus to the study of the finer vessel ramifications, and in this field John Hunter was the first to fix the relations of the maternal and fetal vessels of the placenta by the injection of blue and yellow wax. These relations led him to explain the transmissibility of smallpox to the child in utero, and how in one case the disease did not develop in the infant until four days after birth. Just what part William played in this discovery has never been determined. As a matter of fact, the question of priority which was involved caused a severance of relations, which had already been strained.

The cleanest cut original contribution by John Hunter had to do with the cause of congenital hernia. He, for the first time in human and animal embryos displayed the manner of testicular descent. Like the pons Varoli and the Eustachian tube, the gubernaculum testis came to stay for all time as the gubernaculum Hunteri. Did someone suggest to Hunter the name that so perfectly describes its function? Who knows? When seventeen years old John Hunter could neither read nor write,

yet since Hunter's day nothing of note has been added to our knowledge of congenital hernia.

It is a curious fact in the history of medicine that the path to immortality has so often threaded its way through the treatment of aneurysms. Antyllus and Syme, Anel and Wardop, Hunter, and confidently I add the name of Matas. The Hunterian operation of tying the femoral artery at some distance from the sac was performed by Desault six months before Hunter performed his operation. Hunter did not know of this and based his operation on the new principle of tying in a sound part. The merit of it belongs to Hunter, who planned the procedure after experiments performed on the velvet of deer, in Richmond Park, to show that the collateral circulation is established after tying the external carotid. Hunter's operation has largely lost its place since it has been shown that with modern precautions and absorbable ligatures suppuration in the sac and secondary hemorrhage can be avoided, and that sclerotic arteries can be permanently closed by tying as readily as normal vessels. Although, wherever applicable, extirpations and particularly aneurysmorrhaphy have taken the place of distal Hunterian deligation there still remain not a few anedrysms like that of the internal carotid, which can be cared for only on Hunterian principles.

The third concrete entity with which the name of Hunter will always be associated is the initial lesion of syphilis. Confused as he was with regard to the relationship of gonorrhea and syphilis, he had no misgivings as to the dissimilarity of the hard and soft venereal sores. Having deliberately inoculated himself with lues when he was forty years old, his interest in the disease and the effects of mercury was naturally stimulated. He desired to watch its course in a less impersonal manner. During three years he observed the effects of treatment and believed himself cured, but the gross changes found in his arteries after death were probably the result of his disastrous experiment.

Hunter's treatise on the Veneral Diseases was the most popular of all his productions. The great Ricord edited repeated

editions of it, and in our own country the greatest of our syphilographers, Bumstead, edited several editions.

Hunter had ideas—the stomach tube was the result of one of them. It was made of a little eel skin, fastened to a probang. He studied heat development in vegetation and in hibernating animals. He took the rectal temperature to show the local heat increase from inflammation induced by irritating injections. For this purpose he had made a thermometer $\frac{2}{12}$ of an inch wide and 6 inches long, much like the one now in use. Here was an opportunity missed. Hunter napped. Clinical thermometry did not come into general use for more than half a century later, when Wunderlich systematized it; and what an ungainly thing that old German thermometer was—a foot long and as large around as my little finger. With a few curves in the tube it might easily have been confounded with the instrument of Santorius, of about the year 1590.

Hunter must have been as impetuous in his pleasure as in his mental activities. While dancing he ruptured his tendo-Achillis. The accident caused him to study tendon repair in animals. It was a first and lasting impetus to tendon surgery, and should have been followed by the rapid development of orthopedic surgery. This did not come, however, until many years afterwards, when it was fathered by Stromeyer.

Homologous and heterologous transplantations of tissues and organs were a plaything to Hunter. A tooth which he transplanted into an alveolus just emptied became fixed for a time, but, as has always been the case, for only a short period. That one of his patients was thereby infected with syphilis is an incident worth keeping in mind. The incisor tooth transplanted into a cock's comb fared better. It held firm and acquired union by blood vessels. In the waste of the dental alveoli and the fangs of shedding teeth he received his first ideas of the nature of tissue absorption. Altogether, Hunter's researches on the anatomy of the teeth laid a classic foundation for modern dentistry. It was the first work, which, in addition to accurate anatomical description furnished comprehensive views on their physiology and pathology.

For a man of Hunter's versatility one may consider as minor

contributions the distribution of the olfactory nerves in the upper nasal mucosa, the lachrymal gland duct, the tubules of the testicle and the post-mortem auto-digestion of the stomach. No wonder that students flocked to him. He received five hundred guineas with each of his pupils, who were bound to him for five years.

"Well, young gentleman," said Hunter one day to a student who came to him for the first time, "so you are coming to town to be a surgeon. How long do you intend to stay?" "One year," was the reply. "Then," said he, "I will tell you what. That won't do. I have been here a great many years and have worked hard, too, and I don't know yet the principles of the art." I lay stress on this quotation in view of the rapidity with which "occasional" surgeons are made today. Of all his pupils the name of one will live as perhaps the greatest benefactor of mankind, he who practically drove a scourge from the face of the earth—Edward Jenner. The credit of Jenner's discovery doubtless belongs to him, but there can be no question that Hunter had considered the opinions, prevailing in the dairy districts, of the safety from smallpox of persons who had had the cow pox, merited investigation and that he recommended Jenner to prosecute them. It was not until three years after Hunter's death that Jenner's crucial experiment of vaccinating a boy was made.

Many as were Hunter's contributions to the fundamental branches of medicine and to the science of surgery, his title to pre-eminence is based on his inclusive study of every phase of life, in health and in disease. At his country home he maintained what might readily pass for a small zoological garden. He studied bees, flies, wasps, snails, lizards, cuckoos, hibernating warm and cold blooded animals, even whales. All were made the subject of comparative study. Therefore, of comparative anatomy and physiology he made a science. He never started out with a hypothesis in search of facts. With Scotch clearness of thinking he reasoned from accumulated facts to principles. "For one person," says Buckle, "who can think, there are at least a hundred who can observe. An accurate observer is no

doubt rare, but an accurate thinker is far rarer." John Hunter was both to the 'nth degree.

His loftiest efforts were centered in his work on the "Blood, Inflammation and Gun-shot Wounds." How long did it take surgeons to accept his views that exposure to air certainly has not the least effect on parts exposed. Air takes no part in inflammation. He deprecates the routine practice of enlarging gun-shot wounds, a practice handed down from the time of Pare, and described its origin, to the anxiety of the surgeon, to remove the foreign body. He shows clearly that this may often be left without doing harm.

A hundred years before Lister, Hunter was within touch of the epochal discovery of antiseptic surgery. Listen to this: "We have as yet had, I am afraid, no cure for hectic fever. I believe the cure consists in the removal of the cause, namely, the local disease. Strengtheners and antiseptics are recommended. Strengtheners are proposed on account of the debility which has evidently taken place, and antiseptics from the idea of absorbed pus giving the blood a tendency to putrefaction."

Like Goethe, Hunter was many sided. Arago, in speaking of James Watt, said that in the work of that great man might be found the germs of all the improvements that had since been made in the steam engine. In the same way most of the advances made in surgery since Hunter's time are foreshadowed in his writings.

For twenty years of his life Hunter enjoyed all the honors and emoluments incident to a large surgical and consultation practice. He was a lavish entertainer, and it was not unusual for thirty guests to sit at his table. He had one hobby; it was that of collecting. It resulted in the Hunterian museum. The skeleton of O'Byrne, towering eight feet, cost Hunter 500 pounds. What wonder, therefore, that when he passed away, all that he left of material value was a famous museum, which the government bought for 15,000 pounds. It contained nearly 14,000 specimens, of which a very large number are, even today, in excellent condition, and commands the admiration of every visitor to the Royal College of Surgeons' Museum. The body of O'Byrne was obtained by pardonable fraud. Hunter paid a

large sum to the guardians of the body, who had been commissioned to drop it into the sea. It was dropped according to instructions, but was immediately pulled out again.

Hunter died at 65 from an attack of angina pectoris brought on by an outburst of temper, at all times uncontrollable. Sixty-six years later his body was removed to Westminster Abbey, and placed near that of Isaac Newton. As the coffin was being lowered into the vault, the organ pealed forth that magnificent chorus from Handel's Funeral Anthem, "His body is buried in peace, but his name liveth evermore."

The Royal College of Surgeons placed a tablet on the grave of Hunter to record its admiration of his genius, as a gifted interpreter of the Divine power and wisdom at work in the laws of organic life, and its great veneration for his services to mankind as the founder of scientific surgery.

In more than a century since Hunter's death, only one of our calling was deemed worthy a place in Great Britain's Walhalla, Joseph, Lord Lister. In early training and education, in temperament and consideration for others Lister and Hunter differed as much as man may. Alone and from the heights Lister watched the work of Pasteur on microscopic life and saw its applicability to wound disease. In the narrow field of his studies he followed closely the experiments of the great Frenchman. What Pasteur accomplished for sheep and cattle, for silk worm, fowl and swine, Lister did for the human race. But humanity fully feels that to Pasteur the greater part of its gratitude is due. In a catacomb all his own lies Pasteur, enshrined in the very heart of Paris. Each of these three reached the great goal by the same path. If ever their kindred spirits commune with one another beyond the "Dark River," to send a message to those of us who gratefully revere their memories, it will read something like this: "From the workshop of experiment leads the road to immortality." (Signed) Hunter, Pasteur, Lister.

HOLMES AND DRAKE

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Centennial Celebration Address

AT the command of my colleagues I am here to comply with a usage co-eval with centennial celebrations of beneficient institutions, and to recall the human factors most prominent in conceiving and executing their aims and purposes. The century just closing over this school has encompassed three generations, each in its turn doing its duty as it saw it. The Medical College of Ohio was founded with a small beginning. The idea in which it was conceived was developed and brought to full maturity in the medical department of the University, as it is today. In one form or other it has withstood for a century the vicissitudes of peace and of war. Four times its faculty and sons were at the service of its country. Except for one year, its doors were never closed.

Two of the generations have passed away. What was mortal of the masterful leader of the third was carried from this hall less than a year ago. There are a few of this third generation who tarry, and still "carry on," blending their efforts with those of the young and strong. So do generations imperceptibly go and come.

To have lived through a century, promoting the welfare of the whole central valley, the medical department of the University and its predecessors must have had many men of national and international eminence. This is not the place to refer in specific manner to those whom through the five decades of my students and academic life I admired, and whose memories I today revere. Two of the men who made the College, like the Alpha and Omega, stand out with great persistence. They are Daniel Drake and Christian R. Holmes. They will leave their impress on many generations yet to come. Not by that which they have written, but because of the institutions, of which one laid the foundation and the other the cap-stone.

Fame gained by the pen, or by adding something to the general fund of knowledge, though for the time momentous, is

short of life. There are a few writers of imaginative literature of proportions so titanic that they belong to and are read in all ages. Not so with writers on medicine. Seventy years ago there appeared Drake's enormous work on the "Diseases of the Interior Valley." It took him thirty years to gather the material upon which it is based. He clearly foresaw the microscopic origin of disease. As early as 1832 he surmised cholera to be due to an infection of animalcular origin. He believed tuberculosis to be of this nature and adopted this theory for malaria and typhoid. It was only the thinker speculating on clinical facts. The thought was there, the proofs were adduced by pathologists decades later. Why wonder, therefore, that Drake's work was declared by a committee of the American Medical Association, "a durable monument to his name and to a medical reputation not only of the great valley, but of the greater union." He was given an honorary degree by the Philosophic Society of Edinborough. Twenty-five years after this work appeared, it was obsolescent. Today you will find his volumes on a dust covered rack in the basement of the hospital which he founded.

A few months ago a distinguished Englishman, an internist knighted by his King, for services to medicine, on seeing the admirable tablet to Drake in the hospital, asked "Who was Daniel Drake?" So restricted and ephemeral is the thing we call fame. As Dante has it: "It is like the grass whose hue doth come and go; by the same sun decayed from which it life and health and freshness drew."

But the influence which his writings and lectures had on the men of his day has never perished. The late Sir Wm. Osler affords a brilliant example of this thought: "The foremost medical doctor and classical writer of his time has contributed nothing to give him a living immortality," but his influence will live as did that of Drake, for if there is an immortality of matter transmitted from generation to generation, so there is an immortality of thought passed on from teacher to student.

The reverence we always owe to the memory of Drake rests on a much higher basis. It was his power to convert into con-

structive energy the spirit embodied within him of the trite phrase, "nothing human is foreign to me."

This power he first exerted in an appeal for a high class immigration to the city of his adoption and the great interior valley. To this end he published his picture of Cincinnati, in 1810, an original and eminently scientific work; a most unusual advertisement that would attract the best class of home-seekers only. He, for the first time, publicly outlined a system of canals, which might connect the Great Lakes with the Ohio. He originated the plan of bringing north and south into closer relationship by projecting a railroad from Cincinnati to tide-water, at Charleston, thirty-five years before the first spike was driven on our Southern Railroad. He advocated it not for commercial purposes alone, but that the sections might thereby be pledged to common national interests. This, however, did not keep him from advocating the abolition of slavery, in a series of remarkable letters long before the Great Emancipator had taken up the cause.

What Drake himself lacked in opportunities for study he sought with all the intensity of his nature to secure for others. He laid the foundation of the whole higher educational structures of Cincinnati, and the west. Doctors have always led the way in matters of education. The conception of a large university for Cincinnati originated with Dr. C. G. Comegys. In 1814 Drake founded a college of teachers of which the law department of the University became the heir. He was one of the founders of the Public Library.

The "magnum opus" of his constructive genius is the Medical College of Ohio, which, together with the Commercial Hospital, formed the nucleus of an institution which a second Drake developed to full maturity, and thereby gave lasting form to the Medical Department of the University. College and hospital are one in the concept of Drake. Hospital and college teaching are complementary of each other. In his memorable inaugural address, Drake sounded the keynote which has vibrated with the harmonious advance of medical education for a century. "The time has passed by," he proclaims, "when students will flock to men of genius for the purpose of listening to expositions

of theory or to be amused with creations of imagination. The school which is not based on a hospital may have learned and able professors; but the results of their teaching can never be satisfactory to the student who seeks to make himself a good practical physician and surgeon. For, in the hospital, the student learns pathological anatomy, diagnosis, the art of prescribing and operative surgery." This germ of wisdom has lived a hundred years. Every medical colony must have in it pure culture to survive.

We have it on the authority of his contemporary, Samuel D. Gross, the foremost surgeon of the country during four decades, that Drake was the greatest lecturer of his time. He loved to teach, and because he loved it, did it well. Word portraits painted thirty years apart show how this teaching effected the manner, the grace, the bearing and even the physical appearance of Drake. Of his personal appearance, Fross said, "no man could be in his presence without feeling in contact with a man of superior intelligence and acquirement. His features remarkably regular, were indicative of manly beauty, and lighted up by eyes of wonderful power and penetration." Drake held nine professorships in five different colleges, for he had the temperamental courage of which Emerson speaks, "the war-like blood which loves a fight, and does not feel itself except in a quarrel." Daniel Drake was a notable exception to the words of the great sage, "he that is slow to anger is of great understanding. Drake never grew old. Death overtook him when the frost of 67 years had slightly silvered his temples. It came while he was in the midst of a course of lectures in the Medical College of Ohio, his first and last love. That was seventy years ago. Every one living today in the great commonwealths about us is unconsciously a beneficiary of his work.

Drake wore a large mantle. It fitted the shoulders of only one of his successors—Christian R. Holmes. He too, having acted well his part, laid aside the mantle. So was it ordained that his life work completed, his passing should round out the century.

It is difficult for me to speak dispassionately of Christian R. Holmes. A hundred years hence, when most of us are forgotten

some one, perhaps in this very spot, will speak of him, uninfluenced by the great personality that may bias our judgment. Whoever he may be, on looking about him as we do now, must at once recall the last of the Proverbs, "Let his own works praise him at the very gates." History is the final court.

If we could prophesy its judgment it would little profit us. But we may rest easy. Father Time is always just to the creator of that which is consecrated to good and is beautiful of form. Our present interest is in the qualities of heart and mind which made the man, who for fifteen years held undisputed dominion over the medical affairs of the city of his adoption, and brought to full fruition the ideas and hopes he had conceived. First and foremost, Christian R. Holmes was not nurtured in the lap of luxury. A Dane by birth, and one of the people, he was eleven years old before he learned the rudiments of the language, which, in later years, he used so persuasively and convincingly in the cause he espoused. Even to the end one could at times discern in his speech a touch of his Norse extraction. Yet no one doubted that he was 100% American. At a time when most men seek rest from their labors, he for two years served his country in its time of need. The military hospital in his charge was the model of its kind. To my mind Dr. Holmes is the best example of what our much vaunted melting pot can produce, and of what use can be made of the opportunities so unstintingly and impartially afforded under our free institutions.

From the beginning Dr. Holmes, like Drake, was under the spell of the master word, "WORK." Work with an object clearly in view, work with precision. In the library below there will always be treasured a mechanical drawing made by him in his early twenties. It is of a locomotive drawn to scale; the handiwork of a master draftsman, who throughout life never allowed the hand to lose its cunning. Decades later it became the right hand of the builder. Had Dr. Holmes continued in his first choice of a career, his ability to construct and to organize on a large scale might have made of him another James J. Hill or a Harriman.

An illness from overwork fortunately for all of us, led him to the study of medicine. There were years of struggle, not alone

for an education, but for actual existence. He taught mechanical drawing and worked for the Associated Charities. There he doubtless felt, for the first time, the needs of the poor and of the sick. The altruism that was in him, there found its proper environment, and developed. There, he must have seen the vision that he lived to realize. C. R. Holmes never changed. He simply grew. For the inborn qualities of a man are fixed almost from the beginning, as the warp and woof of a fabric. It is made of cotton, of wool or silk; of these the last is the finest. The qualities of heart and mind which made Holmes esteemed in the zenith of his career were there from the beginning. The privations and struggles of the earlier years seemed but to strengthen and to develop them, and so to stamp, form and feature, that any might exclaim, "Behold here is a man!"

Through three decades Dr. Holmes followed his special vocation. The thousands for whom he saved sight or hearing can better testify than I to the gentle touch, the diagnostic acumen, and the operative skill which placed him in the forefront of his colleagues. His contributions to special literature were many and valuable. They secured for him the presidency of many of the special societies to which he belonegd. In considering the extent of his achievements, as a specialist, I would lay special stress on one point, for the benefit of the incoming members of our profession. It is that for a number of years Dr. Holmes practiced general medicine. Therefore, through all his later intensive studies of a narrow field, he never lost sight of the whole. It saved him from being a mere craftsman, such as are now being developed by the tendency of many recent graduates to enter at once on some narrow and narrowing specialty, and it is common knowledge that the smaller the field the greater is the tendency to megalomcephalism.

The crowning work of Dr. Holmes is this little city on the hill; like the acropolis of old, may it long enshrine the divinities that heal the sick, and with wisdom guard the well. Drake traveled thirty thousand miles to gather material for his now forgotten work. Holmes traveled thirty thousand miles to get blue-prints of all the great hospitals of the world. Four times he went before the people at the polls and four times they voted

their trust in him and his colleagues. With a few of them he interested the wealthy. They became mindful of the adjuration of Luke, the physician, who said, "For unto whomsoever much is given; of him shall be much required." There was directed a great current of generosity towards this school. May it soon grow to proportions short of swamping, so that the names of some now gone, who have helped much to give it national standing may not altogether perish. Bricks and mortar alone do not make a university.

Dr. Comegys, Presidents Ayres and Dabney, among others, had the vision of a great school before Holmes, but it was through his forcefulness, that as through a lens they read their own thoughts slowly. Says Emerson, "I count him a great man who inhabits a higher sphere of thought, and to which other men rise with labor and difficulty. He has but to open his eyes to see things in large relations." From the very beginning of his conception, hospital, college and university were the three in one to him. The final achievement was the work of his hand and brain. With tireless energy and singleness of purpose, applied during fifteen years, Dr. Holmes was the central driving force that built a medical unit which is today unsurpassed by any, and equaled by few. The homage paid his memory a few months ago knew no distinction of class. Cities are made famous not by the number housed within them, but by the ideals for which they stand. On this basis, the art school, the symphony orchestra, the co-operative educational plan, the municipal university and the unification of medical interests in one great unit as a part of the University, have added more to the repute of our city than anything else. The Medical Department is a success in proportions beyond even the vision of its second father. Drake's faculty had four professors, with twenty-four students. The lecture room was the second story of a store. The Legislature awarded Drake ten thousand dollars for the first hospital, of which the College professors were to be the staff. The gift was in depreciated bank-notes. It amounted to thirty-five hundred dollars. The hospital cost eight thousand dollars. Today the hospital, with the annex for tuberculosis, has room for one thousand patients.

It has its social service, work room for patients, and a school room for crippled and injured children. The average daily attendance is fifty-one. There are sixty professors in the Medical Department, with an attendance of over two hundred and fifty. The college is today far too small to accommodate all the desirable applicants. One hundred and twenty-five were turned away this year. Times change, and it is difficult to compare men of different periods. It was said of Drake that he had many irons in many small fires. By comparison, Holmes forged the crank-shaft of a Mauretania. The name of Holmes, like that of Drake, may, in time, be forgotten by all save some delver in musty history; but generations to come will reap from the seed which the one sowed and the other fertilized. Who built the pyramids? Who designed St. Peter's? Yes, who detailed the plans of the Panama Canal? Their names are unknown to most, or if known at all, will soon be forgotten, but their creations stand. In the words of Goethe, "Die That is alles; Nichts der Ruhm." "Fame is naught—the deed is all."

The Father of Medicine coined the word "philanthropy," and in a memorable sentence coupled it with polytechny, the love of handicraft. (Osler.) The love of humanity and of work—they encompass justice and truth, hope which is faith, charity and love. Combined in one man they form character of the type exemplified by Christian R. Holmes. From that character something intangible fused with something in ourselves intangible, and made us better. Facing eternity he indited three letters, to the citizens of Cincinnati, the Directors of the University and his colleagues of the faculty. In them he laid bare the endless love that was in his heart for the triune institution, of which he was the life. Before these letters I bow in reverence for they are the benediction of a great soul winged for flight. I am inspired with infinite hope and confidence in our Alma Mater—his and mine—I see her way clear and alight for another hundred years.

ON THE BORDERLAND OF MEDICINE AND SURGERY

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IT takes a mind with philosophic turn to look backward. It is activated in orderly manner only in piping times of peace. The fiery glare of the mill furnace blinds the eye, but gives no concept of the finished product when cooled. The makers of history never write it. The quills are not yet plucked that will, with finality, indite the records of the tremendous upheaval through which humanity has passed, and which as yet is far from subsiding. Does looking backward pay? It may well be questioned, except as it promotes culture, and cultured people sit on the lid. It was fatal to one curious woman of the Exodus. Five thousand years of religious supremacy and of history's teachings of the frightfulness of war failed to prevent the death and devastation, of which the aftermath will survive most of my readers. It has always been so decreed by nature. Each generation receives its inherited problems, economic, social, political and international, and solves them, little noting or caring for the manner of their upbuilding by the generations that have gone before. James Russel Lowell put it aright:

New occasions teach new duties; time makes ancient good uncouth;
They must upward still, and onward, who would keep abreast of truth;
Lo, before us gleam her campfires! We ourselves must Pilgrims be,
Launch our Mayflower, and steer boldly through the desperate winter sea,
Nor attempt the future's portal with the past's blood-rusted key."

What wonder, therefore, that through the centuries human progress has been one of ups and downs, with an allwise, extraneous, all pervading superhuman influence, guiding it despite ourselves to a higher level. And what is true of every human endeavor must be true of medicine. So remarkable are its manifold activities today that little time is left for looking back over the long and tortuous uphill road by which it reached its present high plane. And for those of us of the middle west,

what time could be more propitious that this, when we are looking on the recessional of a century of medicine and surgery in our great central valley. Such is the purpose of the first number of the College Journal, made possible by the thoughtful generosity of the great man of vision and accomplishment to whom alone we are indebted for all we see about us that is reared in the interest of science and the care of the sick.

Medicine of today is a great complex of many parts, and to me has been assigned the care of the borderland of medicine and surgery. The existence of a borderland of necessity implies surgeons on the one hand and on the other medical men, as it were of "purest ray serene," and there is nothing more interesting in the history of medicine, in the wide acceptance of the term, than the relationship between what was supposed to be the purely intellectual group of its followers, and that representing an alleged handicraft. At times bound together, brains and hands working in the service of mankind, medicine and surgery were paired in dignity and honor. Again, there were long periods when they were separated by an impassable gulf.

It has been stated that the followers of the great school of the father of medicine did not disdain to let the brain guide the hand any more than did Phidias or Archimides. Therefore, for nearly a thousand years, in the schools of Greece and of Alexandria, medicine and surgery, working as a unit, raised medicine to a level where it practically remained stationary for nearly a thousand years.

When his followers took the Hippocratic oath that enjoined them from cutting for stone, it was perhaps not altogether because they considered the operation degrading, but because it required a special skill. There is no doubt, however, that the injunction was partly due to the low repute of many of the specialists who had adopted the operation which was brought from India, and known as cutting on the "gripe," without guide of any sort in the urethra. This operation as improved by Celsus, and a few others, held sway for over twelve hundred years. There was practically no other procedure. Then followed the lateral, bilateral and high operation. Without question, the greatest reputation as an itinerant stone cutter for

generations was Frere Jack, who devised the lateral operation. His success was unusual in degree, if not in kind, for he was a man without any education, a common soldier at sixteen. By way of accident he encountered a traveling lithotomist, who he followed and assisted for a number of years. Assuming an independent career, and the garb of a monk about the same time, he annexed the title of Frere. His first operations at the Charite, in Paris, were on 60 patients, of whom 23 died, 24 remained in the hospital with incontinence or fistula, while 13 recovered. He really began to study anatomy when he was 48 years old, and improved his methods so that within a few years after leaving Paris, he operated on 38 patients consecutively, with success. He died laden with testimonials, gold sounds that had been given him, and he had acquired sufficient education to publish in pamphlet form his method of procedure.

The first surgical operation the writer witnessed, as a medical student of four weeks, just fifty years ago, was a lateral lithotomy, performed by one of the writer's predecessors, Professor George C. Blackman, in the old amphitheatre of the Good Samaritan Hospital. To remove the stone it took less time than it takes to describe the operation. It was as large as a walnut, and from a fissure in it there protruded a long wisp of coarse hair. Answering the sister in charge of the operating room as to how the hair got into the stone, Blackman thought it might have come from drinking unstrained milk. Just twelve years later I performed my last lateral lithotomy.

For several centuries the discussion as to the relative values of the various methods of operating for stone persisted in a most acrimonious manner. To all intents and purposes the high operation alone survived.

May I not be pardoned the seeming swerving from the relations of surgery to medicine and devoting so much space to a discussion purely surgical, to show how the neglect of one large branch of medicine by another may assist in its deterioration. This neglect of surgery on the part of medicine continued through the whole dark ages, and the aftermath, as we shall see, was not entirely dissipated until well along in the last century.

From the beginning of the dark ages, every form of learning was largely usurped by the priest-hood; medicine and surgery proved no exception. Many of them were doubtless very learned, and absorbed in the erudition of Galen. In the sense of the word they were true doctors. They looked down upon the work of the surgeon as little above the menial. Many of the priests had to be shaved twice a week, and to be let blood at least twice a year. For these services the barber was called in, and from the time of the middle ages, as has been intimated, until well along in the last century the surgeon and the barber were in a sense hyphenated. The writer recalls as a boy, seeing above many barber poles, especially in the German parts of the city, a painted sign, displaying a bared arm, with tourniquet near the shoulder and a fountain-like jet of blood, twelve of fifteen inches in height, falling in graceful curve into a brass receptacle. In a corner of the window one would be sure to see a bottle or two of languorous leeches.

But there were not a few educated surgeons in the earliest dawn of the Renaissance who would have furthered the interests of medicine had they not been practically ostracized. For after Avicenna there was no unity. The learned "doctor" in blind idolatry of Galen browsed over his tomes for nearly twelve hundred years.

In France the surgeon was considered a craftsman, and in 1350 the statutes demanded that a doctor of medicine should swear not to perform surgical operations, to treat wounds fractures, dislocations and tumors. A line, distinct for nearly five hundred years, was nicely drawn between medicine and surgery, between internal pathology on the one hand and external pathology on the other. Surgical treatises in France, as late as 1840 and even '50, were occasionally published under the title, "Traite de Pathologie Externe." Notwithstanding the lowly position of the surgeon as a craftsman, as compared with the intellectual internist, the dawn of the new era broke for surgery long before it did for medicine.

The folly of separating medicine and surgery was clearly recognized by some of the surgeons. "Good God!" exclaims Lanfranchi, at the close of the thirteenth century, "why this

abandoning of operations by physicians to lay persons, disdaining surgery as I perceive because they can not know how to operate. No man can be a good physician who has no knowledge of operative surgery. I deem a knowledge of both branches essential." Henry de Mondeville, a disciple of Lanfranchi, whose Latin manuscripts for some reason were not printed until less than fifty years ago, had the clearest ideas as to the nature of wound healing. "Every simple wound will heal without any notable quantity of pus, if properly treated. Many more surgeons know how to cause suppuration than how to heal the wound." His immediate master had controverted the idea that pus must be generated in wounds to make them heal. "Such a practice only hinders nature, to prolong the disease, and to prevent the agglutination and consolidation of the wounds," and still for more than five centuries it was believed essential that wounds to heal must suppurate. In Holmes' treatise on surgery, published in 1860, Mr. Coots still dwells on the "pus bonum et laudabile." De Mondeville's most famous pupil, Guy de Chauliac, who wrote in Latin as pure as any of his time, set forth the creed of a surgeon which can not too often be repeated: "Let the surgeon be well educated, skillful, ready and courteous. Let him be bold in those things that are safe, fearful in those that are dangerous; avoiding all evil methods and practices. Let him be tender with the sick, honourable to men of his profession, wise in his predictions; chaste, sober, pitiful, merciful; not covetous or extortionate; but rather let him take his wages in moderation, according to his work, and the wealth of his patient, and the issue of the disease, and his own worth."

The man who is pre-eminent in surgery of a much later period, must, of course, be at least mentioned here, because though of humble origin, without education, and beginning as a barber's apprentice, he achieved the pinnacle of surgical fame. It was perhaps because he knew no Latin that he insisted on the vernacular being used for surgical writings, that the uninitiated in the classics, who far outnumbered the lettered, might profit thereby. Because Ambroise Pare was given credit as the instigator of many procedures that had been used at times on and off

for centuries before him; he will at all times be considered the founder of military surgery. Again, it was the lowly barber's apprentice rather than the college Pharisee who held aloft the torch. Still the line continued as a line.

The rapid development of anatomy in Italy, often by other than Italians, as, for example, by DuBois, known as Sylvius and Andreas Witting, of Wesel, known as Vesalius, the development of physiology, including the discovery of Harvey, the epochal contributions of John Hunter, all failed to bring surgeons and medical men into proper relationship.

Abraham Colles, of fracture fame, who was almost an exact contemporary of our own Daniel Drake, when asked in consultation had to wait in the ante-room until the medical men in the patient's room had determined whether he was to see the patient or not. If not, it is presumed he took his conge as gracefully as possible. In a short biography of five leading eminent physicians between 1685 and 1825, mention is made of only one surgical consultation, and that with Cheselden.

It takes sometime for new ideas to percolate, and I believe that although John Hunter died in 1793, it was in reality his notable work as a close observer, anatomist, pathologist, experimenter and thinker that did more to bring suregons and medical men together than any other single influence, unless it be the daring of an American surgeon, who first after keen reflection, invaded what was until then believed to be the absolute domain of medicine.

The abdomen had been opened from time to time for the removal of foreign bodies, or for the drainage of an appendix abscess. Auenbrugger, and later Corvisart and Laennec, through accuracy of physical diagnosis, caused the chest to be opened and systematically drained in suitable cases. The skull had been trephined for fractures almost from time immemorial. But, it was Ephraim McDowell, who from a border-line created a borderland, when he did his first ovariotomy in 1809. Mrs. Crawford was operated at 47, and died at 78. Her name should go down in history with that of Alexis St. Martin.

The subsequent history of ovariotomy is of common knowledge. It was long refused a place in legitimate surgery. As

the stoic has it, "no great thing cometh into being suddenly, for not even a bunch of grapes can, or a fig." In 1851, Robert Lee published a table of 163 ovariotomies completed or attempted. Of 102 completed cases, 42 died and of the 60 remaining, 19 died.

Why wonder, therefore, that the famous obstetrician, Scanzoni, of Wurzburg, considered the operation nearly 50 years later an American audacity? And at that very time, within a stones throw of the Geburts Anstalt, there was working the little giant of pathology, Rudolph Virchow, who had then completed his work on embolism and pyaemia, and had laid deep the foundations of his cellular pathology and his still authorative work on tumors. The genius of Virchow, with that of his pupil Conheim, fixed for all time the identity of the varied morbid processes irrespective of the nature and location of the tissue involved. Surgeons and medical men learned that each might be interested in the part of the field that he rightfully believed to be that of the other. Bacteriology coming later furthered this interest. From the very earliest innoculation experiments by Villemain Davaine and Marchand with tuberculous sputum, surgeons foresaw that tuberculosis is tuberculosis whether of the lung, the kindey, bone or intestine.

I left the chief single factor in considering the development of the borderland for the last. It was the discovery of general anesthesia, the greatest boon granted a suffering humanity. With it, "the fiercest extremity of suffering was steeped in the waters of forgetfulness and the deepest furrow in the knotted brow of agony was smoothed away forever." It is generally conceded that Morton was the father of anaesthesia, but its God-father was John C. Warren, the senior surgeon of the Massachusetts General Hospital.

For personal reasons I may be permitted to quote what Oliver Wendell Holmes said of John C. Warren, and his relations to anaesthesia: "He had reached the age when men have long ceased to be called for military duty; when those who have labored during their days of strength are expected to repose, and when the mind is thought to have lost its aptitude for innovating knowledge, and to live on its accumulated stores. Yet nothing could surpass the eagerness with which he watched and

assisted in the development of the new discovered powers of etherization. It is much for any name to be associated with the triumphs of that beneficient discovery; but when we remember the reproach cast upon Harvey's contemporaries, that none of them past middle age would accept his new doctrine of the circulation, we confess it to have been a noble sight when an old man was found among the foremost to proclaim the great fact strangely unwelcome as well as improbable to some who should have been foremost to accept it—that pain was no longer the master but the servant of the body."

Naturally, operations multiplied by leaps and bounds. Dr. Warren tabulated the operations at the Massachusetts General Hospital for the five year periods before and after 1846. In the former there were 184 operations performed, while in the latter there were 487. Curiously enough the mortality of the latter period was nearly 3% larger than that of the former. This was accounted for largely because operations thereunto not performed became more numerous. The technique was imperfect, and the dread of all operations, sepsis, was still the dominent factor.

Alone and from the heights Lister watched the work of Pasteur on microscopic life, and saw its applicability to wound disease. What Pasteur accomplished for sheep and cattle and silk worm, fowl and swine, Lister did for the human race. Humanity feels that to Pasteur the greater part of its gratitude is due. Lister's ideas would long have failed of acceptance in the British Isles, but for Volkman and Bilroth, in Germany, who recognized the far reaching effects of antiseptic surgery. In the beginning Lister was not a prophet in his own land. Asepsis in surgery naturally followed and thereby made surgical operations reasonably safe.

The invasion of the borderland began with the abdomen ,and in a measure from below upwards. Removal of the fibroid uterus and revival of Caesarean section followed on the footsteps of ovariotomy, as surgery progressed. With the low mortality attending the removal of the myomatus uterus today, we are shocked at the mortality attending hysterectomy before the adoption of modern technique and aseptic methods.

As late as 1874, Schroeder found a record of 73 hysterectomies with a mortality of 83.3%. Of course, only the largest growths, threatening life by pressure or hemorrhage were operated upon.

The kidney was next invaded, and by reason of an accident. To relieve a ureteral fistula, resulting from a ureter cut at a previous operation. Simon of Heidelburg, after innumerable experiments on animals, removed the kidney in 1872. Nephrolithotomy naturally followed. Before the day of the x-ray it was a triumph to make the diagnosis of stone in the kidney, based on weeks and possibly months of careful study of the symptoms. The thrill which I used to feel when my finger touched the stone, I have never experienced since Roentgen made nephro-lithotomy somewhat like lifting gold-fish from a conservatory pool with a dip-net.

The upper right quadrant of the abdomen was next invaded. Although operations on the gall bladder had been performed by Petit and others, cholecystotomy could not maintain rank in the list of recognized operations. Lost for more than a century, its reinstatement was counseled by Thudichum, who, in 1859, explained in the clearest language his approval of this operation, and even indicated the steps to be taken in performing it. Although Hanfield, Jones and Murchison likewise endorsed the operation, surgeons refrained from invading this territory.

Bobbs, of Indianapolis, operated in 1868, upon a distended gall bladder, which was supposed to be an ovarian cyst. The gall bladder was opened, the stones removed, and the patient recovered.

To Marion Sims belongs the credit of priority, although even in his case it was undecided whether the tumor was a cyst connected with the liver or a dropsical gall bladder. "We should not wait till the approach of fatal symptoms puts the diagnosis in unmistakable fashion, but we should make an early exploratory incision, ascertaining the true nature of the disease, and then carry out the surgical treatment that the necessity of any case may demand." Two years later I operated on my first case. The man was 76 years old, and had been jaundiced for many months. He had lost about fifty pounds. By operation I removed many concretions which were evidently of varying

vintages. I still have the specimens as one of my cherished possessions. The patient died from exhaustion 26 hours after the operation. Single case reports at that time were abstracted. The Centralblatt fur Chirurgie abstracted the case as follows: "Ransohoff: Gall stones, operation, male, aet.76. EXITUS!!!" Nevertheless, this case (I smile as I think of it), caused Samuel D. Gross to place me among the pioneers in gall stone surgery, together with Kocher, Keen, and Lawson Tate. The genial Kocher himself, had gall stones, but would not be operated upon claiming that the stones belonged to him, and he intended to keep them. He kept his gall stones to a ripe old age, remaining to the very last, the foremost surgeon of his time. C. H. Mayo and Wm. Halsted were less devoted to theirs, and parted with them in the usual manner.

In view of the indications for operation on the biliary ways, now generally accepted, those given by Gross are of interest. "The procedure would seem to be justifiable when all other means having failed, the gall bladder seems a large tense tumor, crowding the surrounding structures and pressing upon them in such a manner as to render life either intolerable or undesirable. It is very certain that when the organ is in this condition nothing else holds out any possible chance for relief, and it need hardly be added that death is seldom far off." The law of Courdoisier with its many exceptions had not yet reached our literature. The low mortality of operations on the biliary passages, less than 8%, inclusive of choledochotomies, accounts for the many pleasant meandrings of surgeons and doctors in this part of the borderland. The doctor at least in one way, profits the more, for he gets here, as in many other operations, a knowledge of morbid processes as they are in the living, rather than in the dead. Witnessing many operations in borderland cases has greater educational value for the doctor than witnessing the same number of necropsies of like kind.

Appendicitis! I had promised myself long ago never to add another line to the millions, or is it billions, that have been devoted to it? But the occasion commands me to ignore the sane advice of Polonius, "Be true to thyself." For I have lived through all aliases of this Bolshevik of the right lower quadrant;

inflammation of the bowels, typhlitis, peri and parithythitis and perityphitic abscess. Then came Reginald Fitz. With the clarity of a seer he gave us in his scientific manner, as he did later of pancreatitis, a pathologic and clinical entity and named it appendicitis. The fight between doctor and surgeon for the title to a diseased appendix waxed furiously and long, but the surgeon now holds it in perpetuity, without lien or mortgage. What if scores of normal appendices are removed? "Is there not more rejoicing in heaven over the return of one sinner than over ninety and nine of the just?"

What is written above applies in less degree to the more common ulcers and neoplasms of the alimentary canal. Shortly after Bilroth did his first pylorectomy, the genial Hyrtl, in his topographical anatomy wrote, "until recently the hidden position of the pylorus protected it from the surgeon's knife. But a little while ago Bilroth had the temerity to remove it for cancer and *mirabile dictu*, the patient recovered." When the page proofs were submitted, there was room for only one foot note, which reads, "she too has gone to her last home." Would she have gone there so soon if the old ulcer, which probably caused the cancer had been surgically cared for? "There's the rub!"

Surgery like medicine is today a full fledged science. If the science of each could be brought to bear on every case of gastric and duodenal disease, it would surely be assigned to the one of the other side of the borderland, where it properly belongs. Many ulcers are doubtless improved and even cured by medicine and diet. But let the gastroenterologist, whose science is still young, think well on the one hand of the innocuousness of a properly made exploration, the low mortality of anastomosis and excision, the cure of congenital pyloric stenosis and on the other hand of the danger of perforation, hemorrhage and impending malignant disease.

My immediate predecessor, Professor Conner, did the first total gastrectomy several years before Schlatter reported his first successful case. The patient died on the table. Speculation is idle, but had the operation been done a year or more before, she probably would have lived; and a great surgeon gained a little more distinction.

In exceptional cases, omentopexy or cecopexy with plication may still be indicated. Chronic intestinal stasis, a more euphonious term than its synonym, chronic constipation, is no better brief for operative interference. The ptoses remain ptotic, and kinks unkinked. The sufferer from anything between baldness and ingrown toenail must seek relief by some less hazardous means than an exclusion operation of a colectomy.

Through the various methods of controlling, preventing or curtailing lung collapse during operations upon the chest, the mortality attending these has been greatly decreased. The conditions that are without the borderland are those of the heart, the acute conditions of the lung, changes in the bronchial tree, and for the most part mediastinal growths. All other morbid processes have come more or less within surgical reach, and some of them are purely surgical. Since empyema is a purely surgical condition, the discussions now waging on the surgical side of the borderland concerning its proper management, call for no consideration in this paper. This is true also of lung abscess, of bronchial fistula and of the foreign bodies impacted in the bronchial tree. Practically all cases of pulmonary tuberculosis are medical from beginning to end. The drainage operation for apical cavities, which was recommended some fifty years ago by German surgeons has been given up. In three of my own cases that I now recall, life was distinctly shortened. In properly selected cases, perhaps, a word may still be said in favor of obtaining a sinking in of the rigid walls, by rib resection. The dangers of opening the pericardium have been minimized through the science of wound treatment, so that pericardial exudations, whether perulent or tuberculous, may be drained with nearly the safety of similar procedures applied to one of the larger joints.

Enlargement of the thymus gland has been removed from the borderland, except in those rare cases in which on account of imminent danger operative interference as a life saving measure is indicated.

In no other part of the human anatomy, except the extremities, has the x-ray been more helpful in diagnosis of diseased

conditions than in the chest. Fortunate as this is in most ways, here, as elsewhere, and particularly in fractures and dislocations of the extremities, it is called into use before an effort has been made at accurate diagnosis, by long established methods. A modernly equipped clinical laboratory looks not unlike a machine shop, so fast are the mechanical aids to diagnosis multiplying. Their lure is almost irresistible. He who yields loses that wholesome mental training which comes of oft repeated logical thinking over the objective and subjective symptoms of many cases, and with the use of only such examining methods as should be at the command of every recent graduate. Be he internist or surgeon, he sinks to the level of a craftsman. Salvation can only come by making of the careful clinical study and the analysis of everycase a real research, and of every operation a safe experiment.

There is one great cavity the lesions of which must still be recognized from purely clinical data. Except in fractures of the skull and spine, radiography is of little service. Therefore is it that about the only thrills internists and surgeons can hope for today is experienced when a perfectly localized abscess, cyst or growth, is found in the cerebro-spinal axis. To localize with an electrode the psycho-motor center, that is the starting point of a Jacksonian epilepsy, has seemed to me the acme of what science and handicraft can accomplish in the borderland of our profession. It is not generally known that in 1874, Robert Bartholow, then Professor of Medicine in the Medical College of Ohio, for the first time demonstrated the localizing functions of these centers in a woman in whom an epithelial cancer had destroyed the vault of the cranium. If I were a neurologist I would hold my head high, feel myself the salt of the earth, and waste none of it on the tail of every pain because it means a nerve in distress.

With the philosophic calm that comes, as Wadsworth puts it, with the years, I have watched the contours of this borderland change. The restless sea takes from one shore to give to another. In the same way many diseases have been put in the surgical domain; not a few have been taken from it by the new gigantic forces generated in the pathological laboratory.

How Lilliputian in point of actual helpfulness, the pathology of a Paget, a Recklinghausen, even of a Virchow, appears today when humanity accepts as commonplace the benefits bestowed upon it by a Bering, a Roux, Nicalodoni; Kitasato, Carroll, by Flexner and Gorgas. Cauterization of suspected tetanizing wounds, nerve stretching and amputation have gone by the board. Prophylaxis has made lock jaw a rare disease, except in cases neglected from the beginning. Thirty years ago, diphtheria carried off whole families of the innocents. Surgeons tracheotomized or intubated many, and saved a few. Antitoxin came and happily took diphtheria from the surgical domain.

Twenty years ago it was not unusual for me to do three or four operations in a week for tuberculosis of the cervical glands. The pathologist located the portals of entry and the nose and throat men did the rest. We still do an occasional operation on some neglected waif in the colored ward of the General Hospital. I am for the decolette fashion of the day. A scarred neck is rare. The King's evil is gone, and with it an important asset of the surgeon.

A new dawn has arisen on the borderland of medicine and surgery. Their spectroscopic units, clinical observation, study of operative end results, pathology, bacteriology, serology, radiology, and last but not least, bio-chemistry, have conflowed to shed a new white light on every nook and cranny of this borderland.

Take the thyroid gland as a practical illustration. Nothing substantial has been added to our knolwedge of its pathology since the minute investigations of Woelffler, quite thirty years ago. For decades before certain forms were considered distinctly surgical, such as those which exerted pressure on the trachea, whether supre-or retro-sternal, and those which though probably innocent, cause unsightly deformity. Later there were added to the surgical category the adenomatous goitres, that had more of less quickly developed exopthalmic symptoms. Uncomplicated premenstrual or adolescent goitre belonged distinctly to the internist. The surgeon who operates such a case, and there are very few who do, is as reprehensible as

the internist who allows a goitre to grow until it exerts great pressure symptoms, or allows a toxic goitre to reach such a stage as to make surgery extremely hazardous, if not impossible. So far as operative treatment is concerned, it was placed by Kocher in the position it holds today. Though some serviceable additions have been made in the pre-operative care and treatment of patients, and some relatively minor operative procedures have been devised, particularly by American surgeons, little that is really fundamental has been added to Kocher's work.

The medical treatment of borderland cases of goitres, particularly the toxic ones, has entered upon a new phase. Of all the many purely medical treatments brought forth, that advocated by my late colleague and dearest friend, Forchheimer, still holds out the most promising results. I know from personal experience with him, how in the early stages it occasionally effected a seemingly permanent cure, and in the later, a long period of symptom quiesence.

When can we claim a permanent cure? Sixteen years ago I did a thyroidectomy for toxic goitre in a woman, brought to the hospital on a stretcher. She should probably not have been touched, but she recovered and all symptoms disappeared. She remained well for over fifteen years, when all the symptoms recurred rapidly, after the shock that was caused by the death of a brother, from cancer of the stomach.

The x-ray and radium treatment of goitre is a distinct advance as they destroy the active secreting tissue of the thyroid, thus decreasing the secretions of toxins. Recently it has been claimed that radiation and medical treatment of goitres gives the same end results as surgery. In a series of cases studied at the Massachusetts General Hospital, the end results were alleged to have been the same at the end of three years, whether surgery or a combined medical and x-ray treatment had been used.

Treatment of toxic goitres until in an irretrievable stage, makes an operation imperative, and at a time when it is attended by the maximum of risk. Fortunately with the epinephrine hypersensitive and the metabolism tests, the early recog-

nition of this condition has been fairly constant. Here the services of the bio-chemist may prove invaluable. Indeed, the story of the future treatment of this condition is now being written in the laboratory. We are hopeful for the first fruits of the study of endocrinology. We have reason to hope that ere long there will be isolated from the thyroid gland the substances which convert its benevolent influence into one of widespread malevolence. Then cases will, with the grateful consent of the surgeon, be taken from the borderland.

For more than a thousand years from Avikhan, let us say, to John Hunter, medicine was sterile, because it ignored surgery, literally the work of the hand. It has often been said with truth that by the opposable thumb monkey became man. The *tactus eruditus* is no empty phrase. Pedagogues are developing it by vocational training. Paganini and Benvenuto are examples of what mind and hand working in unison may do. So have medicine and surgery come together, so to remain until some new inconceivable cataclysm rends the whole educational structure, and leaves it again a chaos.

While reading over my last paragraph on the thyroid gland, there came to me the concept of a concluding theme to this article. I conceived medicine in its most inclusive sense, a four or five story unmodern structure, without the convenience of an elevator. The top floors afford a panoramic view. The doctor and surgeon who apply science live on these floors to which they gain access by laboriously climbing the stairs. They rest from time to time on the landings, learning much about and more from their neighbors on the lower floors, who hold themselves rather Pharisaically aloof. Each of these represent some fundamental science on which medicine rests, but by itself is independent. Together they represent the cognate sciences. Occupying the lower floors, they rarely, if ever, mount the stairs to get the marvelous vista limited only by the horizon. Sometimes they are nomads, like certain of the clergy, with three to six year tenure of parish. They cannot and do not see the whole structure of medicine or learn to love it as do the top floor tenants. The line between the independent fundamental and the applied branches of medicine is clearly drawn. It too will

broaden into a borderland when hospital wards and operating rooms are opened to tenants of the lower floors, that they may see with gladness how much they have contributed toward the alleviation of suffering humanity, and by actual contact with disease, gain new ideas to work out in the seclusion of their laboratories.

Thus will the borderland of medicine and surgery become the property of all who contribute in any way to their advance. Then will be heeded by every one the adjuration of St. Paul: "In lowliness of mind let each esteem other better than themselves; not looking each of you to his own things (only,) but each of you also to things of others."

OUR STUDENTS AND OUR TEACHING

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Valedictory Address at the Commencement Exercises of the Medical College of Ohio, May 8, 1900.

IN the thirteenth century there lived a monk and physician, Simon Cordo. He wrote a key to health. It is not on record whether he wrote it from experience or to acquire it. At all events he gained distinction. It is stated of him that in order to avoid the inconvenience attending his great popularity as a master in the healing art, he built a pillar ten feet high and sojourned upon its top. This elevation being inadequate to free him of the homage of his clients, he from time to time added to the height of the pillar, until finally for thirty years he lived in a house perched sixty feet from the ground.

To each of you this hour is all-important. You are born into life work. So at this season of the year are 1,500 fledglings from 121 medical schools added to the 100,000 doctors already in practice in our vast domain. Therefore, it is not likely that you will soon be called upon to follow the method of Simon Cordo. Your first work will be experimental. But you will not do the experimenting. You will be on trial for some little causes against disease and injury, with the patient and his friends as judge and jury. Acquit yourselves well in these first trials, and the experimental period of your career will be short. "For inasmuch as you have been faithful over a few things, you will be made rulers over many things."

The beginning of life's real work is a venture. It is well that this does not appear to him who, when the start is made, is in early manhood, when the heart is full of hope, desire, and faith, when courage has not yet failed because of ambitions beyond the strength to do. To enter on a medical career is doubly venturesome, for interwoven with the failure or success of the doctor are the welfare and lives of those that have faith in him.

Therefore, it is fitting that before going into the battle of life you be mustered now for the final inspection. Have your lives thus far been fashioned for the services you are about to enter? Are you equipped for the work before you? Keen in our interest, my colleagues and mine, in the outcome of this review, for we feel answerable first, for the quality of the recruit admitted to the service, and second, for his special training.

In looking over the list of graduates of the last three years, I find that a little less than 25 per cent were admitted to the study of medicine by reason of holding academic degrees. Sixty per cent of the matriculates held high-school diplomas or teachers' certificates, and the remainder entered with nothing more than a common-school education, assured by an entrance test examination. One might rightly question the wisdom of admitting the last contingent. In Continental Europe, a preliminary classical training is always made an absolute requirement of medical study. In England the higher degrees cannot be obtained without it. In this country only one school of medicine with large endowment demands the academic degree of each matriculate. Within another year a second school will make such a training a requisite. Were medicine all scientific as is its tendency, or controversial as to dogmas and doctrines, as it was, only college men would be worthy the service. But the real aim of medicine is the healing of the sick and the care of the wounded. In no slight measure is this an applied art, and to that extent is a higher education, however desirable it may be, none the less non-essential. Therefore, to those of you who are lacking in this higher education, I would say, despair not, even of doing great things in your chosen calling. Many of you are from the rural districts, and have learned things beyond the curriculum of any university. Always close to nature and with few things to distract you, you have learned with eyes open to see, to observe. The knowledge that you brought to the study of medicine was your own. You brought with you one great requisite of a physician, self-reliance. No spirit of emulation guided you to our portals. You were led by an inherent desire to take part in a noble work. You came because of the unvarnished grandeur of the William McClure of your

district. You know him, you have seen him with the mysteries of life and death about him, alone in his struggle with the suffering and sorrow that beset him on every side. "You have seen him, perhaps, close the dim eyes of some old laborer whose toil is done, or spend the long hours of a winter's night in some wretched hovel, where even the ushering in of a new life may have failed to bring gladness. Through it all you have seen this man stand alone. No colleague to counsel or cheer him in his work. All this without *eclat* of public position or reward of fame."

As the moss of Iceland flourishes best under the snow; true genius often grows best when unhampered by excess of knowledge. We have our Abraham Lincolns in medicine. The three medical men of this country who have written their names highest on the pillar of fame, McDowell, Sims and Gross, were all country born and reared. Two had a common-school education, and the third a two-years college course, but little better. Yet each in his way opened a new field in the art of surgery, and because they lived lives beyond number have been prolonged and untold suffering cut short.

In 1783 there died in London one whose youth was free, unschooled and untrained. Part of his teens were spent at the cabinet-maker's bench. The growth of his genius was untrammeled by knowing little of many things. Since 1814, the 14th of February of every other year has been set apart for an oration in his memory. His ashes repose in Westminster Abbey, but the name of John Hunter is as a living presence today wherever medicine and its correlated sciences are taught. It was not believed that good could come to medicine but through the portals of Oxford, Cambridge or Edinburg. After announcing his first lecture on comparative anatomy through the press, Hunter found but a beggarly account of empty boxes when the hour of its delivery arrived. His servant man was his only auditor. Hunter said to him: "William, take the skeleton from the wall and place it in a chair beside you, in order that I may begin my lecture by saying, gentlemen, with grammatical propriety." To an opponent who charged him with ignorance of the dead languages, he answered: "It is true, but I can show

you things on the dead body which you never knew in any language, living or dead."

To Hunter, McDowell, Sims and Gross are in a large measure due the immense strides which surgery has taken. The surgery of the blood-vessels, of the abdominal cavity, and most operations of repair surgery owe their being to these men, untrained in early life. Genius such as theirs is rare. Our legislators are aiming, perhaps with questionable wisdom, to exclude the possible development of such genius by raising too high the standard of admission. It is to be hoped that the portals of our schools will never be entirely closed against the entrance of some great mind from the ranks of those schooled in but little more than the book of nature. From a view-point unclouded by conventional training, with perception keen for fresh impressions, he may see things unseen by others and venture into fields before untrodden.

Sixty per cent of our graduates of the last three years were admitted to the study of medicine on a diploma from a high school or a teacher's certificate. Everyone of this contingent is sufficiently versed in Latin, and possibly in Greek, to overcome the few difficulties of technical terms; likewise in chemistry and physics, to begin the study of physiology, and knows enough of one modern language other than his own wherein to read medicine if he so inclines. When medicine was less an applied science than today, when theses which no one read were written in Latin, when the readier debater in some polemics over the humors of the blood was deemed the better physician, and when abstract reasoning took the place of demonstration, a classical education had its value, since the doctor, "doctus," must needs be learned in something. In the past half-century chemistry, physics, and last, but not least, biology, have placed medicine on a scientific basis. It has forever been removed from the purely learned professions of theology and law. Therefore, there are not a few medical educators who believe that the training afforded by a school of technology better prepares a man for medical study than one largely classical. In our high schools and smaller colleges there is a happy combination of all the requirements that can reasonably be demanded of the prospec-

tive medical student for many years to come. Each year the country needs a certain number of men to treat the sick. To meet this want there are not enough college-bred men who desire to enter the profession. With the exaction of a college degree three-fourths of the student body would be forced to schools of inferior grade and enter the practice of medicine with inferior preparation. Far better is it, therefore, that with such requirements as are exacted they be admitted to the older and better equipped schools, where, by conscientious work, they are at least well fitted for the professional labors that are before them.

Nearly every fourth man of our last three graduating classes entered with advanced standing—that is, he had a college degree or its equivalent. It is greatly to be desired that this proportion be increased, for from the college graduate must be developed the highest type of physician. There are wanted more men with the mental training and habits of study which a four years' college course are supposed at least to bestow. Whether the scientific or the classical, or the happy combination of the two be followed, is of slight moment. "The college graduate may have his brain full of useless knowledge, but he had been trained to know the value of a fact, and the nature of a law. He is familiar with what is necessary to prove the one and establish the other." Trained to reason logically, he must of needs from a higher plain view the phenomena of physical life and lead the way for them that are on a lower level. The progress of medicine is not altogether along technical lines. Medicine is a science irrespective of its practical value when applied. In proportion to the development of its fundamental principles is the furtherance of their application made possible. Virchow, and Koch, and Lister have, in this generation, raised medicine to its present high plane not by reason of technical skill, but by the logical enunciation of broad principles concerning the nature of disease, however various its outward manifestations. Qui Bono did not enter into the minds of the discoverers of the germ theory of disease. Its broad principles once established, their practical application to prevention and cure could not be long delayed. With the college reared man rests this leadership in medical progress. In the application of a principle to the prac-

tical work of medicine an inventive mind may add largely to the art; but the furtherance of the underlying science can only come from men trained in science. Therefore would we gladly welcome an increase in the number of college graduates enrolled on our matriculation lists. We do not look for it. In the largest medical schools of the country the relative proportion of college graduates has decreased since a four years' course of medical study has been made obligatory. Added thereto a year of hospital work, and another for post-graduate work, makes the best equipped medical man nearly thirty before he can put to independent use the knowledge he has acquired. In view of present-day social economics this is too late. Success, if it comes at all in life, should come early, lest it fail of those things which alone make it worth the having, the sharing it with others and the urging on to even better work. In the near future academic and medical faculties must arrange their respective curriculums in such a way that the time required for obtaining a liberal general education and the requisite special knowledge of medicine shall not exceed six years. By such a move more than by any other would the standing of medicine among the professions be lifted to a still higher plane than it now holds.

In the last five years your college has demanded of its students attendance on four courses of lectures regularly divided through four calendar years. The graded system of alloting to each year of the course its particular studies has been rigidly adhered to, and the studies from first to last have been arranged to always keep in view the aim of a good medical school—namely, to fit its graduates for the cure of disease and the care of the injured. Conforming to this idea, two years have been devoted entirely to the objective study of the body in health and disease. During these two years you were entirely excluded from the dispensary and the hospital. Whether this is altogether wise the future alone can determine. Anatomy, physiology, chemistry and pathology must always remain the foundation upon which the practice of medicine rests. As with the foundation of material structures, that of medicine is often lost to view. Much of what you of the graduating class knew of anatomy and chemistry two years ago has already been, or will soon be, for-

gotten. You did not enter our portals to become specialists in these departments; nor were we prepared to make you such. Your preliminary training during these two years was with the scalpel and the microscope, the test and the culture-tubes. It was more than ample to prepare you for the usual requirements of professional work. You will, like every honest practitioner, often revert to the study of the sciences underlying medicine as necessities therefor arise. If you have failed to be imbued with the need of looking after the foundation-stones in any case, you are hopelessly lost. Even in these fundamental branches of medicine it is necessary that you keep in touch. Three months ago I received an analysis of the excretion of a patient from a country doctor. There was a detailed account of the microscopic findings. He had estimated the quantity of urea excreted during three periods of twenty-four hours each, with allowances for barometric influences on the instrument used. No professor of chemistry could have done more. alone in a hamlet of five hundred souls, the nearest doctor five miles away, this graduate of the Medical College of Ohio, of the class of '59, had lifted himself above condition and despite of them marched onward with his profession.

In the teaching of the fundamental branches of medicine it has been the aim of your *Alma Mater* to wisely combine the only two methods by which knowledge can be acquired, that by the process of pure reasoning—namely, demonstration—and that by authority, as from reading of didactic lectures. Year by year the demonstration method has been given greater prominence. Twenty-five years ago the personal study of one part of the body was all that was required. In no medical college was a microscope entrusted to any but professional hands. Today every one of our medical students at the end of his second year is from personal objective study, familiar with the gross and finer construction of the human frame. As much as need be learned by the microscope and test-tube of the functions of the body in health has been given you by demonstration. One of oui recent graduates, now instructor in physiology in Harvard, writes: "I have seen no such plugging work in the laboratories here as I saw in those of the Medical College of Ohio." In one depart-

ment only must it be conceded that demonstration has been almost altogether set aside for authoritative didactic teaching. We have no physiological laboratory. Vivisection experiments have therefore played but a small part in your fundamental training. It is altogether to be doubted whether for this reason you will be any the poorer doctors. The right of every student to demonstrate on the living animal that the division of the spinal marrow is followed by paralysis, or that the removal of a certain part of the brain will put an end to spontaneous movements, is open to question. This is not by any stretch to be considered an anti-vivisection argument. Without experiments on animals the death-rate from diphtheria would still be as great as it was ten years ago. Simon, of Heidelberg, operated on thirty dogs to show that an animal could live with one kidney before removing the kidney from the human being. As a result of these experiments, many thousand lives have been prolonged. But there is no further need now for this experiment on the part of the medical student. He should accept the facts on authority. Nevertheless, the physiological laboratory has its place in the medical schools for demonstration by competent instructors and for original research. It is certain that within the year such a laboratory will be found within our walls. Judging from the past, we need look for no extraneous aid. The endowment will come as has every costly addition to our teaching equipment, out of the work, or, more plainly speaking, out of the pockets of the faculty. We can hope for nothing to vie with Harvard College, with its annual income of nearly $35,000 for physiological teaching alone. The requirements will be ample, commensurate with the number of our students, and adequate the teaching of undergrates so much of practical physiology as may be necessary for the real work of later years.

While rapidly developing the demonstrative or laboratory method of teaching, the faculty has not deemed as superannuated the second method of teaching, that by authority as illustrated by the didactic lecture. Science as well as art is long, and life is short. The student, with the majority of mankind, must take his views of many facts of science secondhand, on authority. The great general principles underlying facts

must be taken in the same way—on authority. The proofs are accessible to the specialists in anatomy, physiology, chemistry and pathology, but the medical student cannot be a specialist; therefore, a large factor in his education must be the method by authoritative statement. Shall this be exercised through textbook recitations or didactic lecture? The former has its signal advantages, which, as shown by our curriculum, are fully appreciated. But the book, after all, is a dead thing, dry, immutable and imperceptive; unable to help you if you fail to grasp its teaching; irresponsive when it has scored a success." Did anyone ever gain inspiration from a text-book? In the lecture you come in contact with a living man, who sees whether you do or do not comprehend his meaning; who can use simpler forms of speech and by some trifling change of words make quite clear what before was dark as night; who can see where the links are missing in your chain of thought and can supply them; who can fit you for the work of self-teaching, which, to those who have learned something, is the most valuable of all." The tendency of the modern pedagogue is to set aside the didactic lecture as antiquated and wasteful of time. This tendency is harmful and should be arrested. Acts and living words alone inspire. But for the successive generations upon generations of exponents of the creeds which are based on it, the Bible would have lost its primacy among books, would have failed of its lasting power over the actions of man.

The third and fourth years of your tutelage have been devoted entirely to the practical side of medicine. During three hours daily throughout each course you have come in contact with disease as shown in the dispensary and in the hospital ward or amphitheater. In the eight departments of medicine and surgery, into which the dispensary patients are distributed, your opportunities for direct contact with all the cases that will later come in your office practice have been unexcelled. Six thousand new cases present themselves annually for treatment. This number is large enough to assure you of at least an acquaintance with all the ambulatory afflictions to which man is heir. It is always more difficult to compel attendance on dispensary clinics than elsewhere, because of the multiplicity of ordinary cases and

the comparative rarity of so-called interesting ones. Every case is of interest; if not to the student or doctor, to the patient himself. If the dispensary has formed in you the habit of patiently listening to complaints which you can better describe yourselves, it has done much towards gaining you success in actual practice. In the dispensary, more than in any other medical charity, does the patient give a *quid pro quo*. Ambulatory cases are, as a rule, not harmed by repeated physical examinations. In connection with the dispensary there has been extablished a modest clinical l aboratory, where you have had innumerable opportunities for verifying even as under graduates, the theories taught you in didactic lectures. Here you were first confronted with the actual facts as pertaining to disease, and not with theory. The appeal is made to the fact, and not to the teacher. In a didactic way you were taught the germ theory of disease, but by daily experiment and observation of actual cases you have proven it to be correct. You were taught by lecture and laboratory work that certain germs produce suppuration in wounds, and that by asepsis and antisepsis suppuration can be averted. In your clinical work it has been our aim to practically demonstrate the truth of this theory. Every surgical operation, major or minor, was shown to you to be a test of its truth. You saw that in medicine we are ever engaged in a double process namely, accepting a theory or working hypothesis and subjecting it to constant test and revision. A reverent skepticism was early implanted in your medical way of thinking, lest your work become altogether routine. Individual thought and investigation must not be relegated to the back-ground. The arcana of clinical medicine at least are open to the humblest practitioner who reads, observes and thinks.

In one very important regard your third year's work has been deficient. I refer to the department of gross pathological anatomy. Nowhere else can the mysteries of disease and death be made clear as in the dead-house. Yet you have seen comparatively few post-mortems, and probably made none at all. The neglect of this field is not a specialty with us, but obtains in practically all the colleges of the country. With an abundance of material in our public hospitals, and competent pathologists

to demonstrate the ravages of disease in fresh specimens, conflicting interests, chiefly attendance on large clinics, close to you this most important avenue to learning. As it is the case in Germany, every graduate of medicine should know how to conduct an autopsy. The state needs that this avenue should be opened as much as the medical practitioner. The findings of a post-mortem examination are often the basis of a medico-legal inquiry. Conducted as they often must be by incompetents, they open the way to expert testimony of doubtful value and help to make a travesty of justice. Perhaps by directing attention in this manner to one important defect in our system of medical teaching a concerted effort will be made to overcome it.

In the labors of a physician there is nothing that brings him nearer the divine than the long hours wherein he sees the eternal verity of the original curse—"In sorrow shalt thou bring forth children." Perchance some might look on the all but perfect development in our day of the art of midwifery as a merciful relaxation anent the severity of the first judgment. With ample experience, for a beginner at least, each of you can start on this part of his life's mission with confidence in his power to make parturition safe and painless. Through material financial aid, which your faculty lends to a worthy charity, many hours of your third year were spent in the maternity hospital, where, under competent instructors, the art was taught you. During the fourth year of your studies you have had charge of cases often unassisted. Each of you has had experience of from five to thirty cases. The efficiency of this department of your work is shown by the fact that in four years there has been lost but one mother and three infants out of a total of six hundred cases. When it is considered that you cared for all of these cases under the hygienic conditions which go with poverty, your achievement is justly a source of pride. We can boast of no Sloane Maternity Hospital, with its more than a million endowment, but the teaching strength of a department is in men, and not in the bricks and mortar that invest them.

If you have been constant in attendance, fourteen hours of each week of your third and fourth terms have been passed in

the amphitheaters of the hospitals—eight in that of the Cincinnati, and six in the Good Samaritan Hospital. Here the clinics have been conducted exclusively by your faculty, and many have been the opportunities of examining with them the symptoms of many cases of all kinds, of establishing an independent diagnosis and outlining a course of treatment. There are few indigenous diseases of which you have not seen many illustrations, or operations that you have not witnessed many times. Furthermore, each of you has been given confidence in his power to summon the blessings of anesthesia, for you have had direct and unaided experience with the administration of chloroform and ether. Extremists in the kindergarten system of teaching medicine deride the clinical lecture to large classes as they do its didactic congenes. But derision is not argument. In proportion as the clinical approaches the didactic lecture, illustrated by the actual cases, is its value enhanced. Unfortunately, the clinical lecture is sometimes little more than the exploitage of the technical skill of the clinican. Such a lecture has no worth for the student, and even as an advertisement is of but doubtful value to the operator, for he soon operates before empty benches. Except for this one feature amphitheater instruction to large classes must ever remain a most potent factor in medical education. There is a better place to learn clinical medicine than the amphitheater. It is the hospital ward. While you have had very many opportunities for bed-side instruction, all the hospital advantages afforded by our city are not made use of. Five out of eight hospitals, all of them sectarian, practically close their doors to medical students. In the remaining three the wards are open only through favoritism on the part of the staff. When it is considered that in Germany there will from now on be demanded of every candidate for a license to practice one year's residence in a hospital, the poverty of bed-side teaching in this country becomes plain. Walking the hospital is not a factor in the medical teaching of this country, largely because of a fancied regard for the welfare of the patient. With ordinary care on the part of the teacher, the patient is benefited rather than injured by the ward visits of the students. It assures for him something more than routine

diagnosis and treatment. With students in a ward every case becomes an interesting one. The division of our senior classes into sections for regular visits to the hospital wards must be the next step in the evolution of medical teaching. It is reasonably certain that within the next year the betterments now progressing in the Good Samaritan Hospital will make practicable the plan of bed-side instructions here indicated as most valuable.

In the work of the general physician there is none that comes under lay criticism more than that belonging to the domain of surgery. So far as the ordinary fractures and deformities are concerned, you are not beginners. You have personally applied all the bandages and splints on the living subjects. In small cases you have performed many times on the cadaver, one hundred and forty major and minor operations. So far as the technique of the surgical art can be taught to large classes, it certainly is yours. In making this statement I am absolved of the charge of immodesty, since the credit belongs largely to the younger members of the teaching corps.

Gentlemen of the graduating class, you have passed in review and with your *Alma Mater*. My object has been two-fold; first, to inspire you with confidence because of the qualifications which are yours; to make you hold in high esteem the symbol of your attainments, the diploma which you have just received at the hands of our president. With colleges springing up like mushrooms, it should be a source of distinction to hold the doctorate from an institution which, in point of seniority, ranks seventh among the colleges of the country, the oldest educational institute west of Philadelphia, and one which, after eighty years of continuous work, can show a stainless escutcheon. My second object has been to bring before the directors and faculties of our University the work of its medical department, pointing out its merits without hiding its flaws. This department makes no claim in the distinction of post-graduate work or of training specialists.

Abraham Lincoln is credited with the saying that "God liked the common man, because he made so many of them." To make a high-grade doctor has been the aim of this college. Nothing more has been sought, nothing less has been done.

When endowments flow into the coffers of our University, and can be diverted to its medical department, then and not till then can specialists in teacher and taught be hoped for.

The future of every good medical school lies in its affiliation with a good university. The true university spirit is strong within us. Our faith in the future of our University school has been attested by giving over thirty thousand dollars in equipments and improvements to the city, but we suffer from no illusions. We deal with conditions without controlling them. To do the best that can be done under given conditions with success, is the part of wisdom. To strive for the impossible, though it be ideal with failure assured, were unworthy the judgment of men.

Gentlemen of the graduating class, the bonds that have united us, pupil and teacher, are severed. You are now of a profession with vast demands on the physical, mental and moral nature of its votaries. In its exercises, benevolence and self-denial must ever be present. For years to come half your work by day and night will bring no recompense wherewith to fill the pantry or clothe the back, nor will it ever let you enter the lists where gold is the measure of success. Yet you will be content in lessening the miseries and making light the burdens of mankind. Your calling brings you face to face with the weaknesses of men, but you will share the pride of your craft from time immemorial. You will never abuse confidence. Rather will you spread wide the mantle of charity over human frailties, and look for the grains of gold even among the dross. Cultivate a genial optimism. For in so much as you will have looked on the bright side of life you will not waver when the shadows lengthen. Time changes most things, even the face of nature. The abstract virtues that stand for character alone are immutable. Over a thousand years ago Rhazes wrote concerning the choice of a physician as follows: "Study carefully the antecedents of the man to whose care you are confiding all you have most dear in the world — that is to say, your health, your life, and the health and lives of your wife and children. If the man is dissipating his time in frivolous pleasures; if he cultivates with too much zeal acts that are foreign to his profession, such as

music and poetry; still more, if he is addicted to wine and debauchery, refrain from commiting into such hands a trust so precious. He merits your confidence who, having early applied himself to the study of medicine, has sought skillful instructors, and seen much disease; who has united to the assiduous reading of good authors his personal observations, for it is impossible to see everything and try everything in one's own practice; and the knowledge and experience of a single individual compared to the knowledge and skill of all men of all ages, resemble a slender brook of water that flows by the side of a great river." For myself, my colleagues and our Alma Mater, I bid you farewell.

ADDRESS ON DANIEL DRAKE

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JOSEPH RANSOHOFF, M. D.
F. R. C. S. (ENG.)

1

ONE hundred years ago, there took place in Philadelphia a function thereunto without precedent, and, to my knowledge, never repeated. On the eleventh of May, 1816, special commencement exercises were held in the University of Pennsylvania, to confer the doctorate of medicine on Daniel Drake of Cincinnati. The excellence of his thesis, together with the contributions he had already made to science, justified the faculty in this signal distinction.

At this time Drake was in his thirty-first year. He had already felt the pride of authorship and the struggles of his early life had been passed. But it is to the staging of these struggles that we must look for the forces which lifted the man whom we are commemorating, to a lasting abode in a state's and even a nation's esteem.

Education, beginning with the first intake of air into the quivering lungs of the new-born, goes unceasingly on and may not end with the last conscious gleam, when the final curtain is rung. But character, something altogether apart from, and sometimes even the antithesis of education, is acquired only during the early decades. They are the formative period of the mind, and thrice blessed is he whose rough hewn cradle was rocked among nature's elements undefiled, and whose first uncertain footsteps zigzagged between flowers and trees and shrubs, far from the conventions of urban life. There the eyes learn to see, the ears to hear, the fingers to touch without tuition and without authority; and by this true laboratory method as knowledge is imbibed, the mainstays of character, self-reliance and honesty of purpose are engendered.

Address made June 10 on the occasion of the unveiling of the Daniel Drake Memorial Tablet, presented by Mrs. Elizabeth Drake Morrill Edwards, granddaughter of Daniel Drake.

2

The first fifteen years of his life Daniel Drake spent on the edge of the virgin forest, near the extreme eastern end of the God-favored Blue Grass region of Kentucky. Among low rolling hills lies the peaceful village of May's Lick. When today the corn is high in tassel, and the air is scented with new-mown hay, when the green of the ripening tobacco shimmers in the saturating sunlight like the billowing seas, and the front porches and barns have lost the newness of the spring coat of paint, it would seem that the pioneer day must belong to the remote past.

Yet here lived Drake during thirteen years, at first in a covered pen built for sheep, and later in a real log cabin. His desultory schooling totaled six months. As a sturdy lad, he helped with the planting and husking of corn, the washing and shearing of sheep, the carding of wool and the grinding of corn in a hand mill. As a boy of eleven, he drove a two-horse load of hay twelve miles to exchange it for a bushel of salt procured by the slow process of evaporation by exposure.

Often he would trudge through the woods three or four miles to the village of Washington, to visit Dr. William Goforth, who first imbued him with the dignity of the calling in which he was destined to become so illustrious an example. It is a curious coincidence that from this very village of Washington, Harriet Beecher Stowe's heroine is supposed to have made her escape from slavery, and as is believed by many, to have helped God's most wondrous gift to mankind, Abraham Lincoln, to the first place among the undying. It has been repeatedly observed that the mind of these two intellectual giants present many points in common.

3

Like Lincoln, but preceding him by several years, Drake threw his whole strength into the great political question of the day—the status of the negro.[1] In a series of three remarakble letters to Dr. J. Collins Warren, he directed attention to the ameliorated condition of the slaves and advocated their ultimate

emancipation and colonization in Africa. As a temporary measure, he insisted on restriction of slavery to the then slave-holding states.

A striking point of similarity is the singular command of language which the practically untutored lads acquired. The Gettysburg speech and the second inaugural address of the great emancipator must ever remain the models of English prose, never to be excelled, and rarely to be equalled.

The language of Drake, of course, fell short of this, although his many essays and addresses abound with gems of English prose. Look at the drawing and coloring of these word paintings done at Mackinac in 1842. "When the observer directs his eye upon the water more than the land, and the day is fair, with moderate wind, he finds the surface is variable in its tints as if clothed in a robe of changeable silk. Green and blue are the governing hues, but they flow into each other with such facility and frequency, that while still contemplating a particular spot, it seems, as if by magic, transformed into another; but these midday beauties vanish before those of the setting sun, when the boundless horizon of lake and land seems girt round with a fiery zone of clouds, and the brilliant drapery of the skies paints itself upon the surface of the waters. Brief as they are beautiful, these evening glories, like spirits of the air, quickly pass away, and the gray mantle of night warns the beholder to depart for the village, while he may yet make his way along a narrow and rocky path, beset with tufts of prickly juniper. Having refreshed himself for an hour, he may stroll out upon the beach to listen to the serenade of the waters. Wave after wave will break at his feet, over the white pebbles, and return as limpid as it came. Up the straits he will see the evening star dancing on the ruffled surface, and the loose sails of the lagging schooner flapping in the fitful breeze; while the milky way, Death's Path of the red man, will dimly appear on the waters before him."[2]

4

The impression made in his early life by the beauties of nature and life in the cabin were never effaced. Witness this written in his forty-seventh year:

> "Thro' the chill and dreary gloom,
> Like wailing voices from the tomb
> Of the past year, the northern breeze
> Swept dismal o'er the leafless trees;
> Or reared the snow-drift where the flowers
> Late bloom'd beneath the forest bow'rs:
> And on the darkness of that night
> Fell but the dim and yellow light,
> Which, through the cabin's open seams,
> Came dimly forth, in flick'ring streams"[3]

Of that cabin, "there are no remaining relics. Back to mother earth has gone every vestige of the old log house and huts. Soil a little distinctive in color, a few loose stones and a lonely persimmon tree are the only traces left to mark the habitation of this medical genius."[4]

But the song of the woods was re-echoed throughout Drake's whole life. When he took charge in 1826 of the Western Journal of the Medical and Physical Sciences, he chose for its motto, "*E. Sylvis Nuncius.*" "This was a succinct and happy characterization of the man. He was, indeed, an ambassador from nature, and his credentials have passed unchallenged to this day."[5]

Among the rare books, including a Bible, a speller and an arithmetic, to which Drake had access while on the Kentucky clearing, was the "Letters of Lord Chesterfield." To this must in part be due the courtly manner, the graceful bearing, and the high regard for the dignity of man which Drake always evinced. He early acquired the *suaviter in modo,* but yielded not a whit of the *fortiter in re.* For the prominent feature of his mental make-up, according to Dr. Gross, who knew him through many years, was intensity—"intensity of thought, of action and of purpose."

5

In 1800, Drake came to Cincinnati, a village of about a thousand souls. He began his desultory medical education

in a drugstore and under the tutelage of Dr. William Goforth.

Five years later, without ever having heard a lecture, he received, at the hands of his preceptor, an autograph diploma of Doctor of Medicine, the first to be awarded in the west. This is still preserved as a memorial of the olden time. Drake looked upon it throughout his life as "the tribute of a heart so generous as to set aside all the dictates of judgment as to the qualifications of a stripling to whom it was spontaneously given."

By its authority he practiced medicine for the next eleven years until he received official recognition from the University of Pennsylvania. He attended his first course of lectures in 1805. The tenor of thought of this fledgeling may be gleaned from this quotation which I find on the fly-leaf of his first manuscript note book: "What high capacious powers lie folded up in man, how far beyond the brain of mortals may the eternal growth of nature to perfection half divine expand the blooming soul."[6]

The second course of lectures came ten years later. With a quaint sense of humor he writes of the long interval. "No business can be conducted without renovating the capital stock as it becomes wasted. It is now many years since I began the practice of physic, which is a trade in ideas, and I begin to seriously feel an exhaustion of scientific funds. Not being able to replenish them, I said but little, being willing, like all others, to support my credit as long as it was possible."

6

These prolonged visits to Philadelphia in the formative period of Drake's life determined the bent of his genius. He sat at the feet of the first of American anatomists, Wister, the first of American surgeons, Physik, and the first great American physician, the patriot, Benjamin Rush. He was particularly impressed by the brilliant lectures of Rush, after which he fashioned his own.

The classic monograph by Rush on the epidemic of yellow fever, was the germ that long was dormant in the mind of Drake,

eventually to grow into his one monumental contribution to medical science, "The Diseases of the Interior Valley."

In Philadelphia, the physician has always occupied a relatively higher position than elsewhere, and in the time whereof I speak, was dominant; in New England, it was the clergyman; in New York, the successful commercial man; in the South, the aristocratic planter; but next to Franklin, Benjamin Rush was the foremost citizen of Pennsylvania. There Drake unconsciously absorbed the dignity of his calling, and its high value as a social power, if its scope be not limited to the care of the individual sick or wounded.

The well organized university, the flourishing college of physicians, the library and hospitals with many allied philanthropies conceived in him the laudable aim to duplicate them in his own little city for the good of those who were already a part of it, and the thousands—and perhaps, who can say, the hundreds of thousands—who were to come.

7

We are wont to say vernacularly, and, therefore, forcibly, that this or that man put this or that city on the map. There are Stratford-on-Avon, and Oyster Bay and Lincoln, Nebraska, but this is literally true of Daniel Drake and Cincinnati. Shortly after his first visit to Philadelphia, he published his first essay of sixty pages, "Notices Concerning Cincinnati." It was followed in 1815, by a "Picture of Cincinnati." In the preface, he writes that "an account of a village in the woods, necessarily differs from that of a populous city. The former dwells on the natural objects and advantages, while the latter exhibits the progress of improvement and expatiates on the works of art. They are, moreover, read for different purposes. We desire to know what there is in a new country that can recommend an emigration thither; in a city we seek for that which is worthy of imitation or adoption."

It was, therefore, eminently logical that the volume afforded maps, treated of the topography, the river, geology, the climate, population, the antiquities, the flora and the timber, and that

it should end with a portrayed vision of the future greatness of city he so dearly loved. He, for the first time, publicly outlined the system of canals which might connect the waters of the Great Lakes with the Ohio, foresaw the commercial dependence which the South must long acknowledge to Cincinnati, and touched on the remoteness of spanning the river with a bridge. In the meantime, he believed a steam ferry boat might answer the needs.

This work established the author's reputation in the nation and abroad. How great an impetus it gave to the growth of Cincinnati and outlying territory it is difficult to estimate. The original and eminently scientific character of the book could only have interested the best class of homeseekers who might be anxious to seize the advantages so glowingly painted. The high intellectual average of those who came to this city in the second and third decades of its existence must clearly be the merit of Daniel Drake, for his picture could not attract the ordinary man.

That the first testimonial to the enormous services rendered the city by Daniel Drake comes at this late day, and then only at the hands of a generous descendant, confirms again the proverbial unmindfulness of republics. The time to make amends has come. By erecting a monument worthy the man, Cincinnati should be paying a late but just tribute to its most eminent citizen, the man who nursed her in her infancy, and in the full strength of her youth made her glorious before the world.

8

Next to Cincinnati, Dr. Drake loved the Great Interior Valley. From Hudson Bay beyond its northernmost limits to the Mexican Gulf, from the eastern mountains to the western limits, he knew the country and its people. Here be believed would be the melting pot from which by amalgamation of races there would in time arise the final type of American manhood. He hopes that the sectional line delimiting slavery might be effaced, for he knew and admired the people of the South, and

deprecated the exaggerated stories circulated in the North, of cruelty to the negro.

As a means of bringing the sections closer together and not for commercial purposes alone, Drake originated the plan in 1835, of projecting a railroad from Cincinnati to tidewater at Charleston. He wanted the North and South to shake hands with each other, yield up their social and political hostility, pledge themselves to common national interests and live together as friends and brethren. How far was his horizon from that of the business man of his day! The projection of the larger scheme originated with Drake, probably on the spur of the moment, at the close of a meeting on Change to consider the building of a railroad from Newport or Covington to Paris, Kentucky. He served as chairman of a committee, and forcibly promulgated the plan at a large convention held in Knoxville, a year later.

The scheme came to naught chiefly through the machinations of Kentucky, which feared a loss of prestige. Fifteen years after the close of the Civil War, when time had, in part, assuaged its pangs, and scarred its wounds, the Southern Railroad was built. One of Drake's great visions was realized.

9

It is a curious trait of man that what of good he has missed in early life he strives to get and make safe for those who come after. This is true of wealth, of position, of influence, and above everything else, of education. The word "uplift" is of recent coinage, but the idea is coeval with the first implanting of the cultural seed.

What Drake lacked in early general and vocational opportunities for study, he sought with the whole intensity of his nature to secure for his adopted home. Of him it may be said truly that he laid the corner stone of the whole higher educational fabric of Cincinnati, and the west. It is true that our neighboring commonwealth to the south gave higher education and earlier impetus, through the University of Transylvania at Lexington, where Drake taught for two years. Lexington was

then more populous than Cincinnati, and it was doubtful whether the latter would ever grow to metropolitan proportions.

In 1814, Drake founded a college for teachers. Within a year or two, he was instrumental in the beginning of the public library. In three years the medical school, which proved to be the *magnum opus* of his genius for constructing, will celebrate its centenary, and with it there will be completed nearly a century of the institution in which we are gathered today.

Drake's purpose in establishing a medical school in and as yet a sparsely settled territory sprang from his unique studies on the relations of geography and topography to disease. The most recent medical historian[7] in reference thereto links his name with that of Hippocrates and Sydenham. It was because he believed that a student should study disease as it exists in the part wherein he hoped to locate, that he conceived the idea of a school in Cincinnati.

By legislative enactment Drake personally secured the grant of $10,000 from the state legislature towards the payment for the Commercial Hospital of Cincinnati, and it was by legislative act that its inmates were to be cared for by the professors in the school of medicine.

10

Drake's latest and best biographer concisely describes the concept of their founder. "To him the two institutions were really one."[8] Hospital and college teaching are the complements of each other. Can the voice of the spokesmen of the Rockefeller Foundation better sound the keynote of the harmonious advance in medical education than did Drake in his memorable inaugural address? "The time has passed by," he proclaims, "when students will flock to men of genius for the purpose of listening to expositions of theory or to be amused with creations of imagination. The school which is not based on a hospital may have learned and able professors; but the results of their teaching can never be satisfactory to the student who seeks to make himself a good practical physician and surgeon. For in the hospital the student learns pathological anatomy, diagnosis, the art of prescribing and operative surgery."

The twin creations of Drake's genius in advance of its time, offered an advantage over all the colleges then established in the United States. It made the five months course obligatory.

The solid foundation laid by Drake assured permanence to the temple of learning, near which, through all his peregrinations, he hoped he might be buried. Through ninety years, the Medical College of Ohio faced the stress of storm and battle with banners high. Like the famed temple of Janus, except for one year, it never closed its doors, until its battles over, peace reigned. I greatly fear that its very name may soon be but a memory, and so may be that of its sister and long its rival school, providentially named for the lesser stream. Their waters have merged so fully that even today the discerning eye can see no line of demarcation. Under the aegis of a great university, this nighty current of medical education born of their confluence goes smoothly and swiftly on to the fulltide fruition of what a hundred years ago was but a dream; and Daniel Drake was the dreamer.

11

The school which Drake founded now ranks among the foremost of the country. Its gates of entrance and of exit are of the precise height and width called for by the blue-prints of the Medical College Association and the Rockefeller Institute. According to a rigid time schedule, it is predetermined for the student how many hours he shall spend in this or that laboratory, how many in the dissecting room, how many experimenting on animals, how many peering into microscopes, how many he shall walk the wards of the hospital, and how many he may sleep through didactic lectures. The total requiremenst of 4,000 hours is an educational absurdity. Figuratively speaking, a time clock registers his every movement. As a result, the products of our modern medical schools, whether located in the east, west, north or south, issue from them in stenciled pattern, the one differing from the other only according to the quality of the raw material, the stuff of which he is made.

"Method," says Linnaeus, "is the soul of science," and on this basis the status of medical education today can leave

nothing to be wished for. Students are classified according to years, and their studies according to semesters. From the elementary fundamental branches of chemistry, biology and anatomy, stone on stone is raised until the structure is completed. If the student of today is earnest, he may, therefore, when he graduates, have a view of medicine as a unified science, broader and more penetrating than he will ever have again. He has only to go into intense cultivation of some little specialty to make it shrink concentrically within a year to two to what one may see through a knot-hole at arm's length.

Writing on medical colleges in 1832, Drake questioned the feasibility of having separate lectures for junior and senior students, but advised progress along definite lines of study. He believed the whole medical curriculum "should, as far as possible, be purely synthetical." I do not know that this term has ever been applied to any department of education before or since. Yet, it perfectly describes the present way of making a doctor by the laboratory method.

He would, indeed, be a grouch who would cavil at the giant strides of medical education in the past two or three decades. Under its relentless heel, the weaker schools, which grew up like mushrooms to nearly two hundred in number after the civil war, have been decimated five times, and the end is not yet. Within a few years the half fledged schools, poor in equipment and clinical material, will have passed out of existence. All privately owned schools are being forced to yield their charters to university or commonwealth. Fortunate, indeed, is the school which, in its transfiguration, can, like that founded by Drake and that of its offshoot, be graciously and lovingly embraced by a generous alma mater born of a whole people.

And the maximum of good thereof enriches the whole people. Hygiene in the home, the school, the factory, sanitation in every field of physical endeavor, scrupulous supervision of food sources and products, and the care of our dumb fellow creatures, are the far-reaching but direct results of the higher medical requirement of our day. And the doctor has by these very requirements been lifted in the social plane he never occupied before.

12

And yet—yes—there is a yet. It is that the walls encompassing all higher education, in particular that of medicine, are absolutely rigid and inflexible. Genius unless leashed in steel may not enter. If it be attended by poverty, there is an added bar. Altruism in the form of stipends may lift the bar, but there is no open sesame for brains unmeasured by rule and square. It may be a sentiment with me, born with a feeling for the lowly, it may even be sentimentality, but it is there. Drake, reincarnated in some poor and untutored youth of the mountains of Kentucky, would bruise his knuckles with vain attempts to enter the school which he founded. He would fall into the ditch which, with the highest aims for mankind and with all the clarity of his logic, he had dug for others.

It jars one's sensibility to read the following from the pen of Drake, who, untutored and far from rich, entered medicine. "Parents who are too poor to afford their sons the necessary opportunities should not aim at making them physicians. If we now and then see one whose talents, ambition and enterprise have enabled him to acquire distinction, in despite of every obstacle, we meet with many more who, all their lives, remain unfinished and imperfect from the want of adequate time and opportunities while engaged in their studies." The son of a cabin plebeian, Drake was democratic in every relation of life except one. He believed in a hedged-about aristocracy not of learning but of the learned.

There is a republic of letters, another of the finer arts, and yet another for those that are mechanical. Whosoever listeth may enter. Every soldier of France, it is said, carries a marshal's baton in his knapsack. But medicine of today in every part of its wide ramifications is a closed shop. This should not be. The university has no monopoly of learning. And teaching, one of its highest functions, an art like any other, and recognizing like other arts, no fixed canons, may choose to abide without its walls.

Much of this learning and all the teaching are an economic waste. The time must therefore come when, rare occasions

warranting, independent and extra mural work shall again be given credit towards a degree as it was of yore. There would be obstacles, but they would not be insuperable in the face of a principle to be established. Qualification in an applicant for a degree should count almost as much as the manner of its obtaining. Then may we confidently hope for some healthy variations in the type of medical graduate, and last but not least, see averted the already visible deleterious effects of constant inbreeding in our professorships. Let it be remembered that Robert Koch, of undying fame, was taken from an obscure little town of Prussia, and placed at the head of the Imperial Institute for Hygiene.

13

Drake's concept of medicine was comprehensive and concise. He believed it to be a physical science and a social art. In this, the second generation after him, this concept has been realized to a degree which even Drake could not have forseen. Better than any man of his day, he knew typhoid fever, yellow fever, malaria and cholera. Through bacteriology, the new scientific Richmond in the field of battle against them, these scourges are on the road to banishment from the habitation of civilized man, and made all but harmless in their most prolific tropical breeding places.

Diphtheria, the *angina maligna* of his day, has become a curable affection. By a needle puncture we are enabled to separate those liable to it from the immune, and safeguard the former by inoculation. The wounds of civil life accidentally or surgically inflicted have lost most of their terror because this new science has eliminated infection from their wake. But the science which safeguards life and saves life when imperiled is impotent when confronted by man's inhumanity to man.

There is now being enacted the monstrous crime of the ages, in seeming mockery of our boasted civilization, of state and church, of High Omnipotence itself. In this seemingly endless tragedy, the chivalry of old plays no part. There is no truce. In the trenches or narrow strips of blood-stained earth between them, the dead lie where they fall, and rot. The wounded

through hours or days are tortured by wounds, ghastly, caked with blood and earth and filth. What wonder that of 123 wounded brought into a French base hospital, and observed by one of my friends, 120 were infected. Thus the loftiest work of science may be swept away as cataclysms sweep away the strongest of human devisements and lay them level in one huge deluge.

14

In looking on medicine as a social art, Drake felt that it must be of social service. He was the first to secure a state home for the insane, and another for the blind. All he did in the way of writing, teaching and practicing medicine left him a large surplus of energy which he loved to expend for the public and in public. He loved to be in the public eye. Said one of his contemporaries, "He believed that a man could not have too many irons in the fire, and the consequence was that he generally had the tongs, shovel and poker all in at the same time." [9]

Like Drake, all of us should believe in medicine as a social art, and therefore should be in touch with and, as far as possible, direct the many agencies that make for better conditions of life and the lessening of its ills. For with the new idea of the value of man, even in dollars and cents, we recognize as corollary that every case of sickness is an economic waste, and only a symptom of something wrong with the community.

To prevent the one and correct the other is primarily the office of medicine. The National Association of Milk Commissions, similar associations for the control of cancer, of tuberculosis and of epilepsy are the immediate results of this function. For self-evident reasons, the executive work and financing must be entrusted to the ever-growing number of philanthropically inclined men and women. Nowhere is this better shown than in the microcosm of a modern general hospital. Drake's idea of a hospital organization was that the "rights and duties of the professors and pupils should be clearly specified and so comprehensive as to secure for the sick the best possible attendance while they in turn should repay society and

the profession for the charity they received by the benefits which their cases can be made to confer on students."

This *quid pro quo* was his limit of hospital service. Today the hospital social service is second only to the strictly medical and surgical. It strives to rehabilitate the man or woman who has been knocked out by sickness, whether it be innocently or through guilt acquired. It looks after those dependent on the patient and eases his mind. It occupies the despondent in handicraft work, and lifts him from despair. It establishes schools on roof-gardens for children who must be long interned, and follows the milk-fed babies out of the hospital and sees them safely through infancy. It searches out work that the man with defect of heart or hand or foot may safely do, and last, though it should come first, it saves from utter ruin most of the subnormal girls who are mothers and not wives, and gives them a new setting in society. The ways in which all this is brought about are incomprehensible to most of us of the stronger sex, for it is chiefly done through the devious and inscrutable ways of woman.

15

Drake did not live to see the crowning achievements of his genius and industry. The second volume of his colossal work on "Diseases of the Interior Valley" was not published by his literary executors until two years after his death, in 1852. He surely was under the spell of the Master Word Work during the thirty years in which he gathered the prodigious material embodied in it. The manifold duties of his practice, of teaching and preparing innumerable public addresses, never deflected his aim, to make this work the basis of a lasting fame. This it did. There are a few writers of imaginative literature of proportions so titanic that they belong to all the ages and are read in all the ages.

Of writers on medicine this can not obtain. They write for the generation in which they live and perhaps for the oncoming one. After that, they are of historic value only, and if really great, are enshrined in reverent memory. But their works are not read except by delvers in history. This is true of the work

of Drake, although after the first volume appeared it was declared by a committee of the American Medical Association, meeting in Cincinnati, "a durable monument to his name and to the medical reputation, not only of the great valley, but of the greater Union."

Most of this work was obsolescent twenty-five years after it appeared. But I may be permitted one quotation to show how logical was Drake's speculation on the microbic origin of disease, for, as early as 1832, he surmised cholera to be an infection of animalcular origin. He believed tuberculosis to be of this nature and later adopted this theory for the various types of malarial fever and typhoid.

"Among visible plants and animals," he writes, "there are species that form no poison and others which secrete that which applied to, or inserted in our bodies produces a deleterious effect, which is generally of a definite kind. Thus the venom of the rattlesnake produces a disease of definite form; certain fish are poisonous when eaten; bees and wasps instill venom and the smallest gnat, the sand fly, inflames the skin. It seems justifiable to ascribe, by analogy, to microscopic animals and plants the same diversity of properties which we find in larger beings, differing from them, as we may presume, in nothing but size and complexity of organization. We may suppose then that while many species of this minute creation are harmless there are others which can exert upon our systems a pernicious influence." [10]

The most advanced bacteriologist of today can add nothing that is fundamental to this clear deduction from clinical facts alone. As we see it now, these deductions were purely theoretical; but to theorize is to think.

16

To gather his material, Drake traveled some 30,000 miles by boat or rail, in canoe or on horseback. He personally wrote hundreds of letters to physicians in every populous center in the Mississippi Valley, and thereby made his work the first model for collective investigation. The entire treatise has 1,700 pages,

almost altogether of original matter, the result of personal and scientific research. It is difficult for us of the stenographer and typewriter day, to believe that the industry necessary to the achievement of so large a work could be centered in one man. But Drake had his own conception of industry. "It is money," he affirms, "it is credit, it is power, it is time. It is money, credit, power and time united." His industry secured for Drake everything but money. Eight years after Drake's death A. H. McGuffy, his executor, received $250.00, the total balance to the credit of the author. Nothing in fact that Drake ever undertook was financially profitable.

In studying the manuscripts now in the possession of the University of Cincinnati, I came across a passage which may in part account for his voluminous writing. I would particularly impress it upon my younger colleagues who write or speak reluctantly or not at all, because they think they have nothing to say. It is as follows: "But few minds are so gifted with power as to think profusely without the aids of written or spoken language. The pen and tongue are, in fact, instruments of thought and it is while using them that many of our most original ideas germinate, or, having been previously germinated, expand into maturity."

Parenthetically, it may be noted that many sheets of his manuscripts, now dry and yellow with age, have holes in them. They are round, or oval, with a narrow border, gradually shading from black through brown, to the general yellow of the page. I like the fancy that Drake occasionally sought the pipe for inspiration and that the dark rimmed holes attest to moments of restful abstraction.

17

It would be beyond reason on an occasion like this to touch upon every activity of so versatile a man as Drake, and one can only touch upon the chief of the many radiating ways traveled by the influences of this master mind. And of them, next to that of his written word, was that of the lecture room. Drake loved to teach, and because he loved it, did it well. During thirty-five years, he held nine professorships in five different

schools. A restlessness innate in his makeup and an habitual discontent with his professional environment made him an itinerant in medicine. The longest continuous professorship, ten years, he held at Louisville.

We have it on the authority of his contemporaries that Drake was the greatest lecturer of his time. It can avail us little to study the manner and method by which he achieved this distinction. Every one of us must dig that out for himself. But we can draw a valuable lesson from the fine effects which I believe long application in the lecture field had upon the manner, the grace, the bearing and even the physical appearance of the lecturer himself. In 1821, Drake was already famous. This is what Graham A. Worth[11] writes of him at this time: "I had drawn his picture in accordance with my notion of his character. I had given him a fine person, an easy dignified address, classic features, and a capital head. When I came to see him, 'Father Abraham,' I said to myself, 'what a mistake is here.' With the exception of that small thinking eye of his, there was nothing under heaven of an intellectual appearance about him nor did the sound of his voice so flatter the ear as to make amends for the disappointment of the eye."

Thirty years later, Gross said of Drake's personal appearance that it was striking and commanding. "No one could approach him or be in his presence without feeling that he was in contact with a man of superior intellect and acquirements. His features, remarkably regular, were indicative of manly beauty, and were lighted up by blue eyes of wonderful power and penetration. His forehead was high, well fashioned, and strongly denotive of intellect. The nose was prominent, but not too large. His voice was remarkably clear and distinct."

The contrast between these two portraits painted thirty years apart is striking. It shows how the mind long engaged in lofty thinking, with the heart beating in public service, may beautify the shell in which they have their being to become a lasting benediction when his is laid aside.

Said the Egyptian priest to Solon: "You Hellenes are never anything but children; there is not an old man among you."

Drake was such a Greek. He never grew old. The frost of sixty-seven winters had slightly silvered his temples when death overtook him in the midst of work and of a course of lectures in his first and last love, the Medical College of Ohio.

18

To speak nothing but good of the dead is a salve for the fresh wounds of bereavement only. I should be unfaithful to my task if I did not touch upon one striking discord in the character of this eminent man. It is not dwelt upon in any of the many eulogiums pronounced at the time of his death, but it stands out boldly through study of the many polemics in which he engaged, and of his relations to the schools in which he taught. He must have been an autocrat with limitless loyalty for friends and like relentlessness to enemies. This, for example, is how he flayed one of his opponents. "To give a full length portrait of this *gentleman* would be a labor similar to that of dragon making in the Romances of the Sixteenth Century. It would be to combine all that is cunning and contemptible in the moral world. As it relates to the intrigues in the medcal college, he is like his idol, Cash, the root of all evil, like a general infection of the body everywhere present, corrupt and corrupting." [12]

Drake was "a problem in physical dynamics." "He would not be satisfied with anything short of the unlimited control of the destinies of the institution." [13] with which he was connected. His was a rule or ruin policy. For one year, he wrecked the college which he had founded, and later started a rival school, where he gathered about him a remarkable faculty. Here, at the instigation of Drake, Samuel D. Gross, America's foremost surgeon, gave the first course on pathological anatomy in this country. After four years, the school closed its doors, partly because it lacked endowment, partly because of internal dissentions, but chiefly because being conceived in enmity, it lacked the support of both professional and public approval.

In extenuation of Drake's conduct in relation to the schools with which he was connected, there stands out his overwhelming superiority to the men about him. Of this he must have been

keenly conscious. Had patience with men of less ability and calmness of disposition "entered more largely into his nature, Drake would have been happier with his colleagues, and they, to say the least, infinitely more comfortable."

I have reserved this defect in the character of Drake to the last, because of its intense human interest. For gifted as he was, with vision almost prophetic, with mind and body assiduously cultivated in the service of his fellowman, and deeply imbued as he was with a religion based on love, love of peace and forgiveness, Daniel Drake, the eminent genius, second to only one of the west, was after all just a man. By the measure of our lives in years, the falling veil that left him on its dark side fell long, long ago, but through it from somewhere and somehow, there is shed a glowing, growing radiance, the common heritage of everyone now living and still to be born in the Vast Interior Valley.

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